Lab Code: 200707-0

FCC PART 22 & 24 TYPE APPROVAL

EMI MEASUREMENT AND TEST REPORT

For

ZTE Corporation

ZTE Plaza, Hi-tech Park, Nanshan District, Shenzhen, Guangdong, China

FCC ID: Q78-MG3006

November 12, 2007

This Report Concerns: ☒ Original Report	**Equipment Type:** GSM Module
Test Engineer:	Jeff Zhang
	Bo Xiong
Report No.:	RSZ07112302
Test Date:	November 1-7, 2007
Reviewed By:	David Gong
Prepared By:	Bay Area Compliance Lab Corp. (ShenZhen) 6/F, the 3rd Phase of WanLi Industrial Building, ShiHua Road, FuTian Free Trade Zone, ShenZhen, Guangdong 518038, P.R.China Tel: +86-755-33320018 Fax: +86-755-33320008

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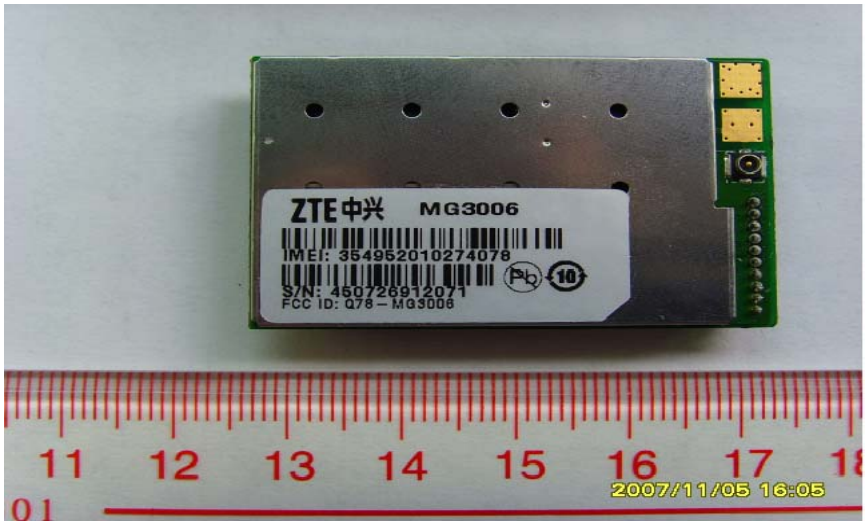
GENERAL INFORMATION

Product Description for Equipment Under Test (EUT)

The *ZTE Corporation*'s product, model number: MG3006 or the "EUT" as referred to in this report is a GSM Module. The EUT is measured approximately 44 cm L x28 cm W x 7.6cm H, rated input voltage: DC 3.9V.
The GSM 850MHz frequency range is TX 824MHz～849MHz, RX 869MHz～894MHz
The GSM 1900MHz frequency range is TX 1850MHz～1910MHz, RX 1930MHz～1990MHz

- The test data gathered are from production sample, serial number: 450726912071 provided by the manufacturer, we receive the EUT on 2007-10-26.EUT Photo
- EUT Photo



Objective

This Type approval report is prepared on behalf of ZTE Corporation in accordance with Part 2, Subpart J, Part 22 Subpart H, and Part 24 Subpart E of the Federal Communication Commissions rules.

Related Submittal(s)/Grant(s)

No related submittal(s).

Test Methodology

All tests and measurements indicated in this document were performed in accordance with the Code of federal Regulations Title 47 Part 2, Sub-part J as well as the following parts:

Part 22 Subpart H - Public Mobile Services
Part 24 Subpart E - PCS

Applicable Standards: TIA/EIA 603-C, ANSI C63.4-2003.

All radiated and conducted emissions measurement was performed at Reliability Test Center of ZTE Corporation. The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

Test Facility

The test site used by Reliability Test Center of ZTE Corporation to collect radiated and conducted emission measurement data is located at it's facility in Shenzhen, Guangdong, P.R. China.

Test site at Reliability Test Center of ZTE Corporation has been fully described in reports submitted to the Federal Communication Commission (FCC).

The detail of these reports has been found to be in compliance with the requirements of Section 2.948 of the FCC Rules on November 25, 2005. The facility also complies with the radiated and conducted test site criteria set forth in ANSI C63.4-2003.

The Federal Communications Commission has the reports on file and is listed under FCC file 373926. The test site has been approved by the FCC for public use and is listed in the FCC Public Access Link (PAL) database.

Additionally, ZTE Corporation Reliability Test Center is accredited by China National Accreditation Service for conformity Assessment (CNAS), Accredited Program (Lab Code L0611).

SYSTEM TEST CONFIGURATION

Justification

The system was configured for testing in a typical fashion (as normally used by a typical user).

EUT Exercise Software

EDGE-INSTECTOR

Special Accessories

The special accessories were provided by Manufacturer.

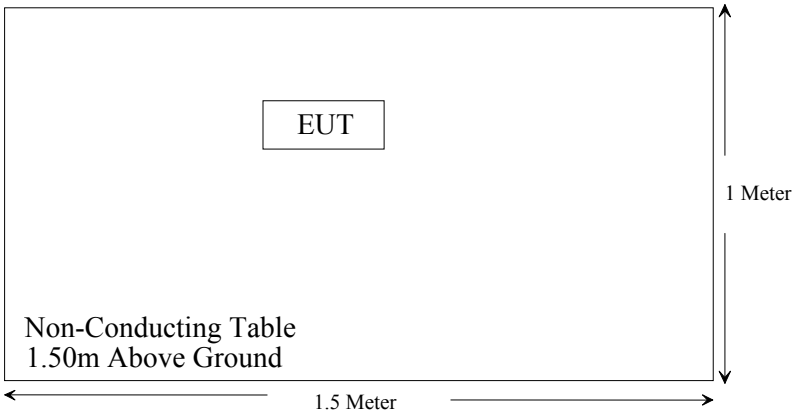
Schematics and Block Diagram

Please refer to the Exhibit D.

Equipment Modifications

ZTE Corporation Reliability Testing Center. (ShenZhen) has not done any modification on the EUT.

Configuration of Test Setup



SUMMARY OF TEST RESULTS

FCC RULES	DESCRIPTION OF TEST	RESULT
§2.1046	RF Output Power	Compliant
§ 2.1091	RF Exposure	Compliant
§2.1047	Modulation characteristic	Compliant
§15.209(a)	Radiation Emissions	Compliant*
§2.1053	Spurious Radiated Emissions	Compliant
§2.1051, §22.917(a), §24.238(a)	Spurious Emissions At Antenna Terminals	Compliant
§2.1049 §22.917 §22.905, §24.238	Occupied Bandwidth	Compliant
§22.917, §24.238	Band Edge	Compliant
§ 2.1055 (a) § 2.1055 (d) § 22.355, § 24.235	Frequency stability	Compliant

* Within the measurement uncertainty

§2.1091 - RF EXPOSURE

Limit

According to §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

According to §1.1310 and §2.1091 RF exposure is calculated.

Limits for Maximum Permissible Exposure (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm^2)	Averaging Time (minute)
Limits for Occupational/Controlled Exposures				
0.3-3.0	614	1.63	*(100)	6
3.0-30	1842/f	4.89/f	*(900/f\2\)	6
30-300.	61.4	0.163	1.0	6
300-1500	/	/	f/300	6
1500-100,000	/	/	5	6

f = frequency in MHz
* = Plane-wave equivalent power density

Test Data

Predication of MPE limit at a given distance

Equation from page 18 of OET Bulletin 65, Edition 97-01

$S = PG/4\pi R^2$

Where: S = power density（mW/cm^2）
P = power input to antenna （mW）
G = power gain of the antenna in the direction of interest relative to an isotropic radiator （numeric gain）
R = distance to the center of radiation of the antenna（cm）

For 850 MHz:

Maximum peak output power at antenna input terminal: 32.81dBm
Maximum peak output power at antenna input terminal: 1910mW
Prediction distance: 20 cm
Prediction frequency: 836.6 MHz
Antenna Gain (typical): 0dBi=1 mW（numeric）
Power density at prediction frequency at 20cm: 0.38 mW/cm^2
MPE limit for uncontrolled exposure at prediction frequency: 836.6/300=2.79 mW/cm^2

$0.38(mW/cm^2) < 2.79 (mW/cm^2)$
Result: Pass

For 1900 MHz:

Maximum peak output power at antenna input terminal: 30.55(dBm)
Maximum peak output power at antenna input terminal: 1135mW
Prediction distance: 20 (cm)
Prediction frequency: 1880 (MHz)
Antenna Gain (typical): 0 (dBi)=1 mW（numeric）
Power density at prediction frequency at 20 cm: 0.226(mW/cm^2)
MPE limit for uncontrolled exposure at prediction frequency: 5 (mW/cm^2)

0.226 (mW/cm^2) < 5 (mW/cm^2)
Result: Pass

§2.1046- RF OUTPUT POWER

Applicable Standard

According to FCC §2.1046(a), For transmitters other than single sideband, independent sideband and controlled carrier radiotelephone, power output shall be measured at the RF output terminals when the transmitter is adjusted in accordance with the tune-up procedure to give the values of current and voltage on the circuit elements specified in §2.1033(c)(8). The electrical characteristics of the radio frequency load attached to the output terminals when this test is made shall be stated.

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	UNIVERSAL RADIO COMMUNICATIO N TESTER	CMU200	110325	2007-01-18	2008-01-18

*** Statement of Traceability**: ZTE Corporation Reliability Test Center is accredited by China National Accreditation Service for conformity Assessment (CNAS), Accredited Program (Lab Code L0611).

Test Procedure

The RF terminal of the EUT was connected to the RF terminal of the CMU200.

Test Data

Environmental Conditions

Temperature:	18 °C
Relative Humidity:	53 %
ATM Pressure:	1009 mbar

The testing was performed by LIUKE on 2007-11-6, 2007-11-7.

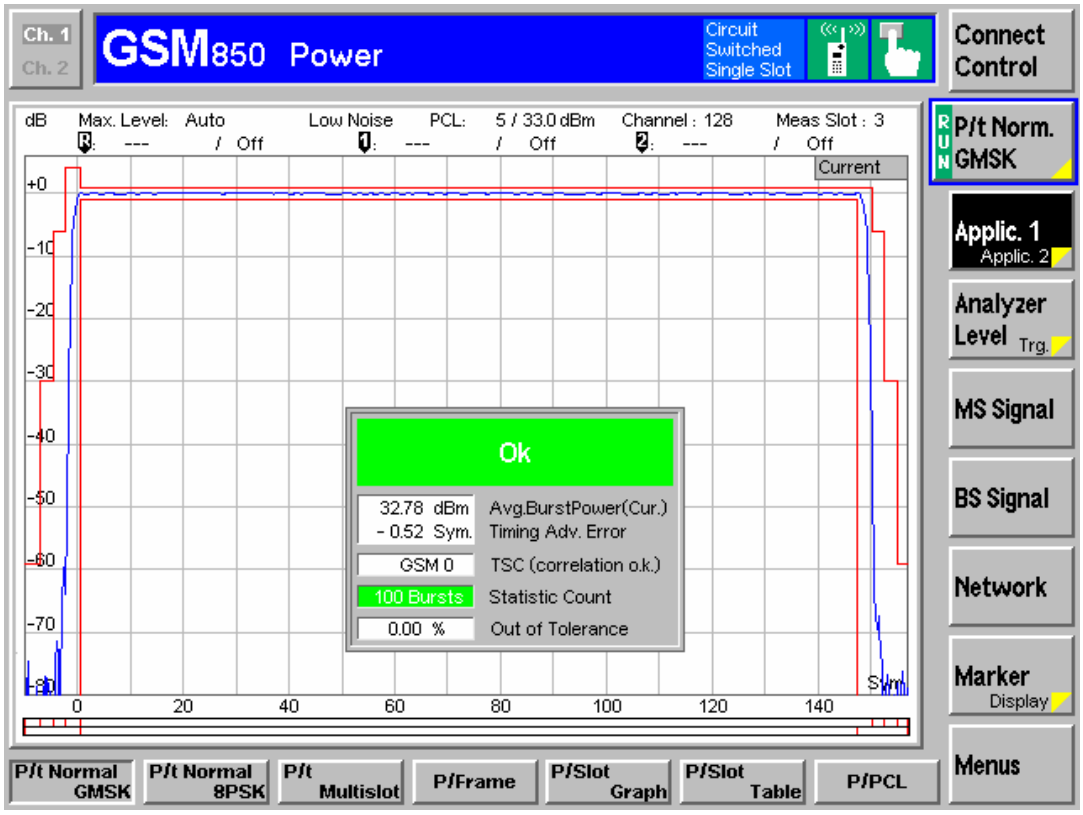
Test Result: Pass

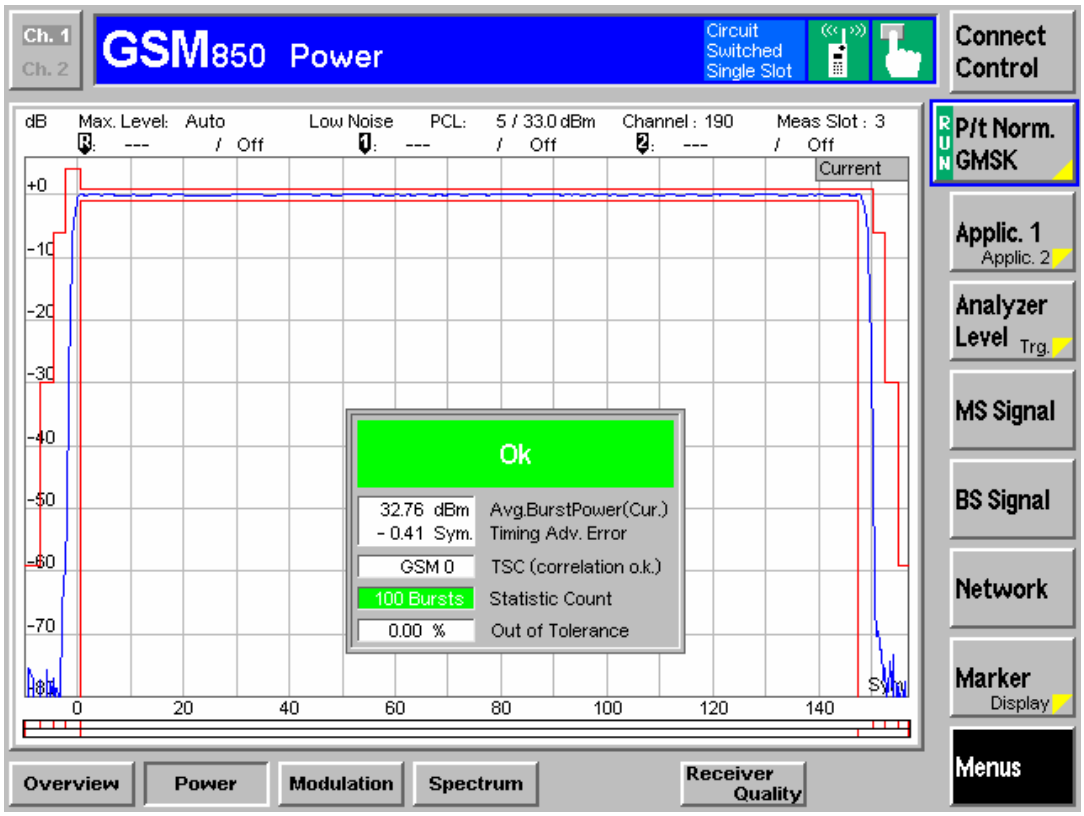
Test Mode: Transmitting

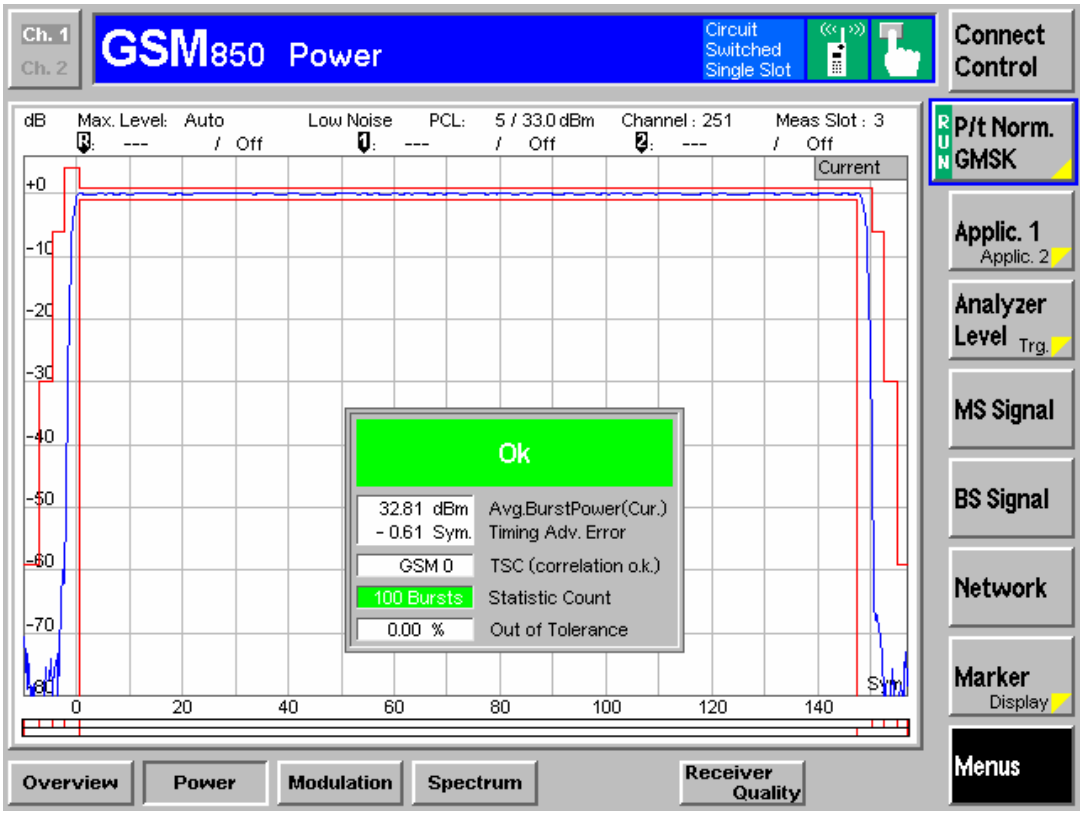
For 850 MHz

Channel	Frequency (MHz)	Output Power (dBm)
Channel 128	824.2	32.78
Channel 190	836.6	32.76
Channel 251	848.8	32.81

Note: There are two ways signals operation at antenna port at same time, so the maximum output power at the antenna port with internal combiner shall add 3 dB.



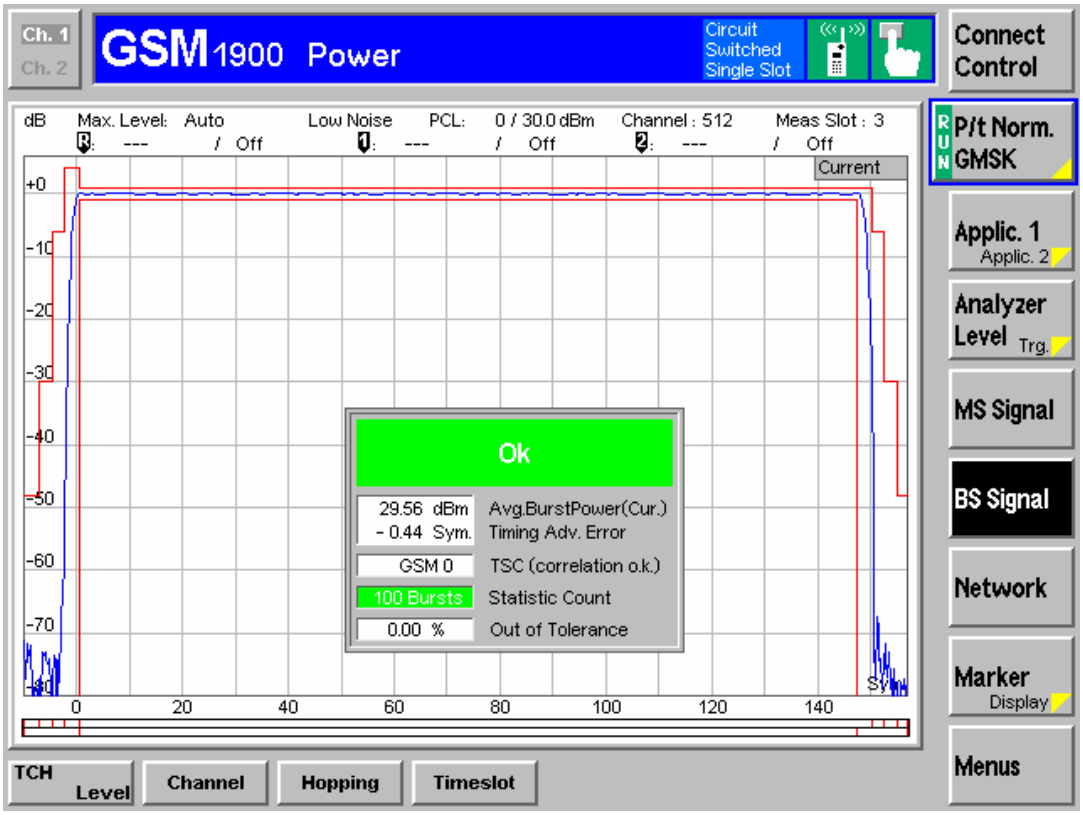

Ch. 1
Ch. 2
GSM850 Power
Circuit Switched Single Slot
Connect Control
dB
Max. Level: Auto
Low Noise
PCL: 5 / 33.0 dBm
Channel : 190
Meas Slot : 3
Current
+0
-10
-20
-30
-40
-50
-60
-70
0
20
40
60
80
100
120
140
Ok
32.76 dBm
Avg.BurstPower(Cur.)
- 0.41 Sym.
Timing Adv. Error
GSM 0
TSC (correlation o.k.)
100 Bursts
Statistic Count
0.00 %
Out of Tolerance
RUN P/t Norm. GMSK
Applic. 1
Applic. 2
Analyzer Level Trg.
MS Signal
BS Signal
Network
Marker Display
Menus
Overview
Power
Modulation
Spectrum
Receiver Quality

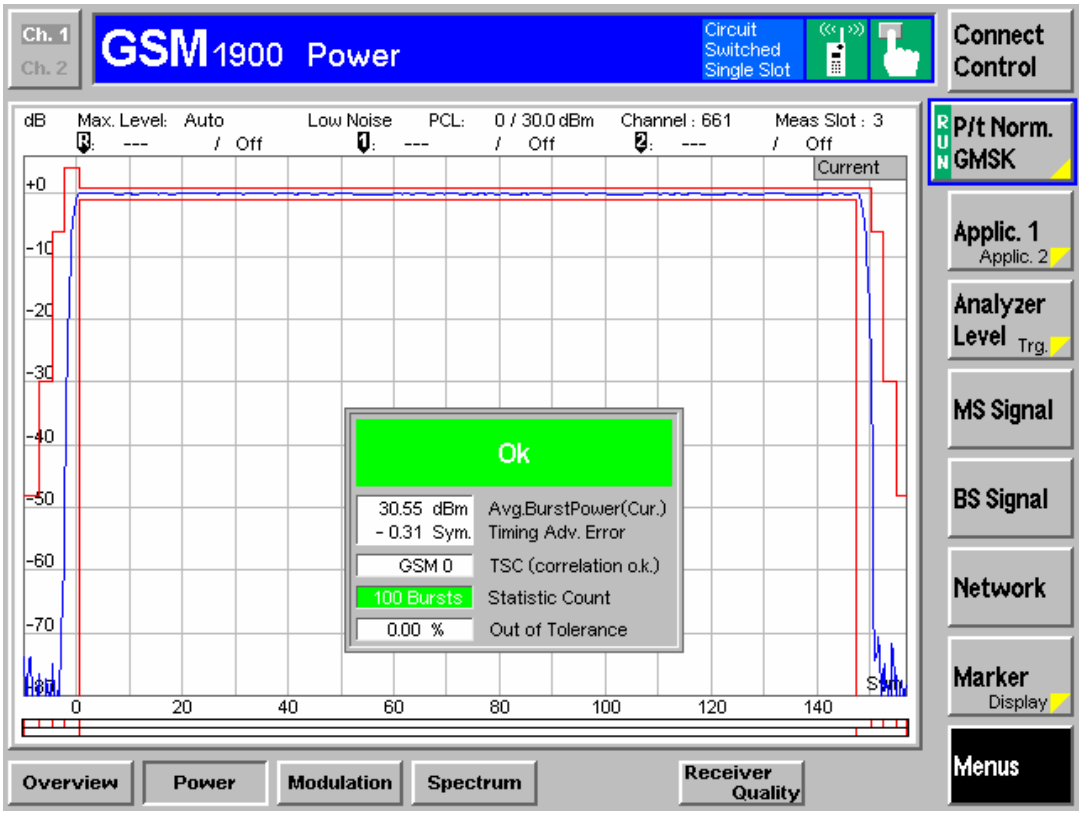

Ch. 1
Ch. 2
GSM850 Power
Circuit Switched Single Slot
Connect Control
dB
Max. Level: Auto
Low Noise
PCL: 5 / 33.0 dBm
Channel : 251
Meas Slot : 3
Current
+0
-10
-20
-30
-40
-50
-60
-70
0
20
40
60
80
100
120
140
Ok
32.81 dBm
Avg.BurstPower(Cur.)
- 0.61 Sym.
Timing Adv. Error
GSM 0
TSC (correlation o.k.)
100 Bursts
Statistic Count
0.00 %
Out of Tolerance
RUN P/t Norm. GMSK
Applic. 1
Applic. 2
Analyzer Level Trg.
MS Signal
BS Signal
Network
Marker Display
Menus
Overview
Power
Modulation
Spectrum
Receiver Quality

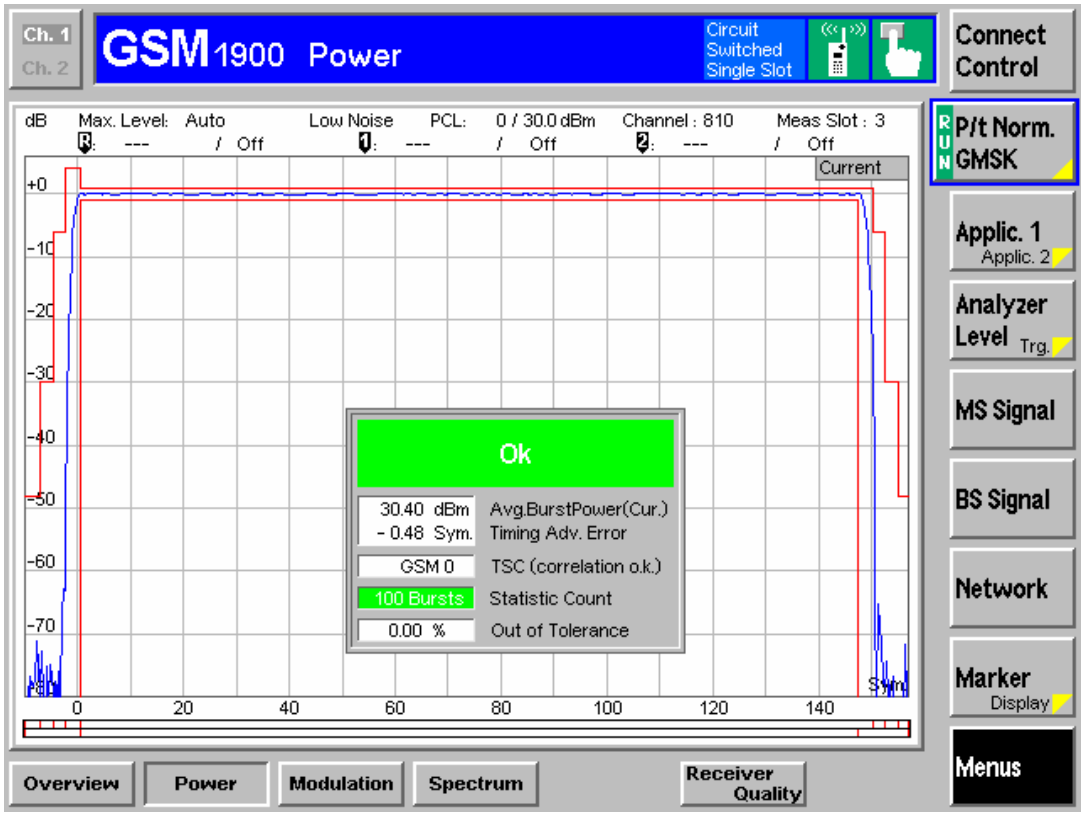
For 1900 MHz

Channel	Frequency (MHz)	Output Power (dBm)
Channel 512	1850.2	29.56
Channel 661	1880.0	30.55
Channel 810	1909.8	30.40

Note: There are two ways signals operation at antenna port at same time, so the maximum output power at the antenna port with internal combiner shall add 3 dB.




Ch. 1
Ch. 2
GSM 1900 Power
Circuit Switched Single Slot
Connect Control
dB
Max. Level: Auto
Low Noise
PCL: 0 / 30.0 dBm
Channel : 661
Meas Slot : 3
Current
Ok
30.55 dBm
Avg.BurstPower(Cur.)
- 0.31 Sym.
Timing Adv. Error
GSM 0
TSC (correlation o.k.)
100 Bursts
Statistic Count
0.00 %
Out of Tolerance
RUN
P/t Norm. GMSK
Applic. 1
Applic. 2
Analyzer Level
Trg.
MS Signal
BS Signal
Network
Marker
Display
Menus
Overview
Power
Modulation
Spectrum
Receiver Quality


Ch. 1
Ch. 2
GSM 1900 Power
Circuit Switched Single Slot
Connect Control
dB
Max. Level: Auto
Low Noise
PCL: 0 / 30.0 dBm
Channel : 810
Meas Slot : 3
Current
Ok
30.40 dBm
Avg.BurstPower(Cur.)
- 0.48 Sym.
Timing Adv. Error
GSM 0
TSC (correlation o.k.)
100 Bursts
Statistic Count
0.00 %
Out of Tolerance
RUN
P/t Norm. GMSK
Applic. 1
Applic. 2
Analyzer Level
Trg.
MS Signal
BS Signal
Network
Marker
Display
Menus
Overview
Power
Modulation
Spectrum
Receiver Quality

§2.1047- MODULATION CHARACTERISTIC

Applicable Standard

Requirement: §2.1047.

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	UNIVERSAL RADIO COMMUNICATIO N TESTER	CMU200	110325	2007-01-18	2008-01-18

*** Statement of Traceability:** ZTE Corporation Reliability Test Center is accredited by China National Accreditation Service for conformity Assessment (CNAS), Accredited Program (Lab Code L0611).

Test Procedure

The RF terminal of the EUT was connected to the RF terminal of the CMU200.

Test Data

Environmental Conditions

Temperature:	18 °C
Relative Humidity:	53 %
ATM Pressure:	1009 mbar

The testing was performed by LIUKE on 2007-11-6, 2007-11-7.

Test Result: Pass

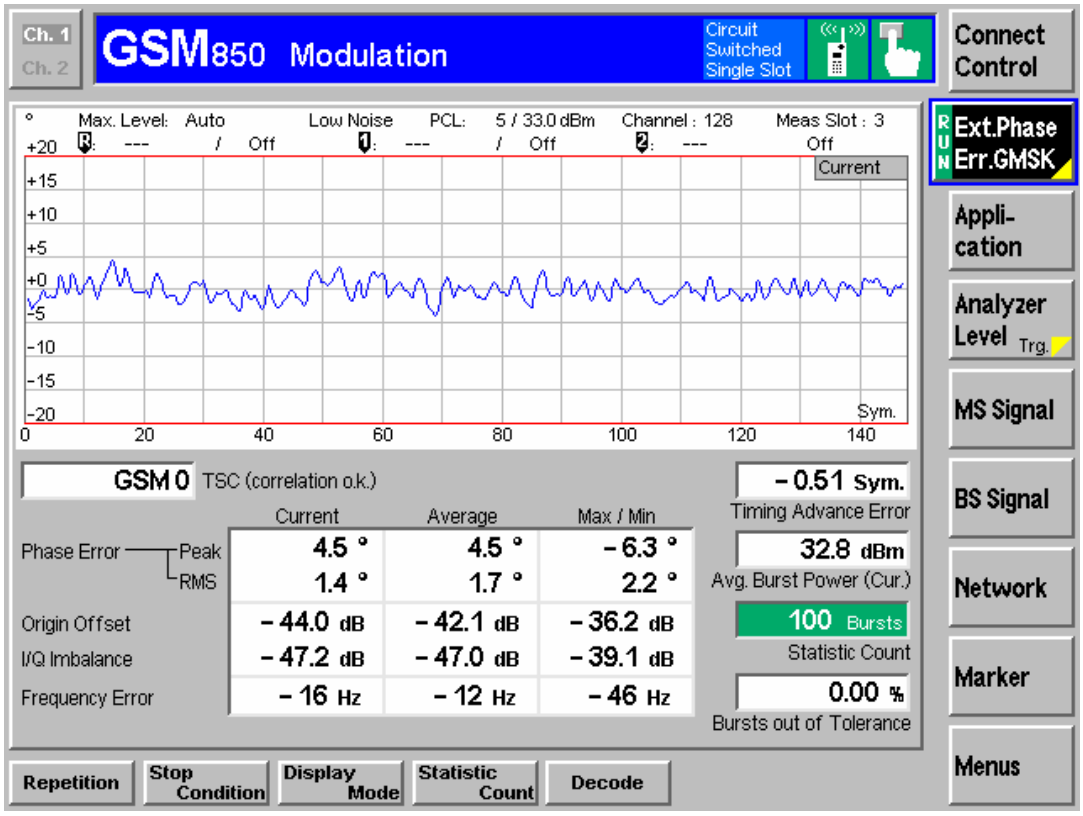
Test Mode: Transmitting

For 850 MHz

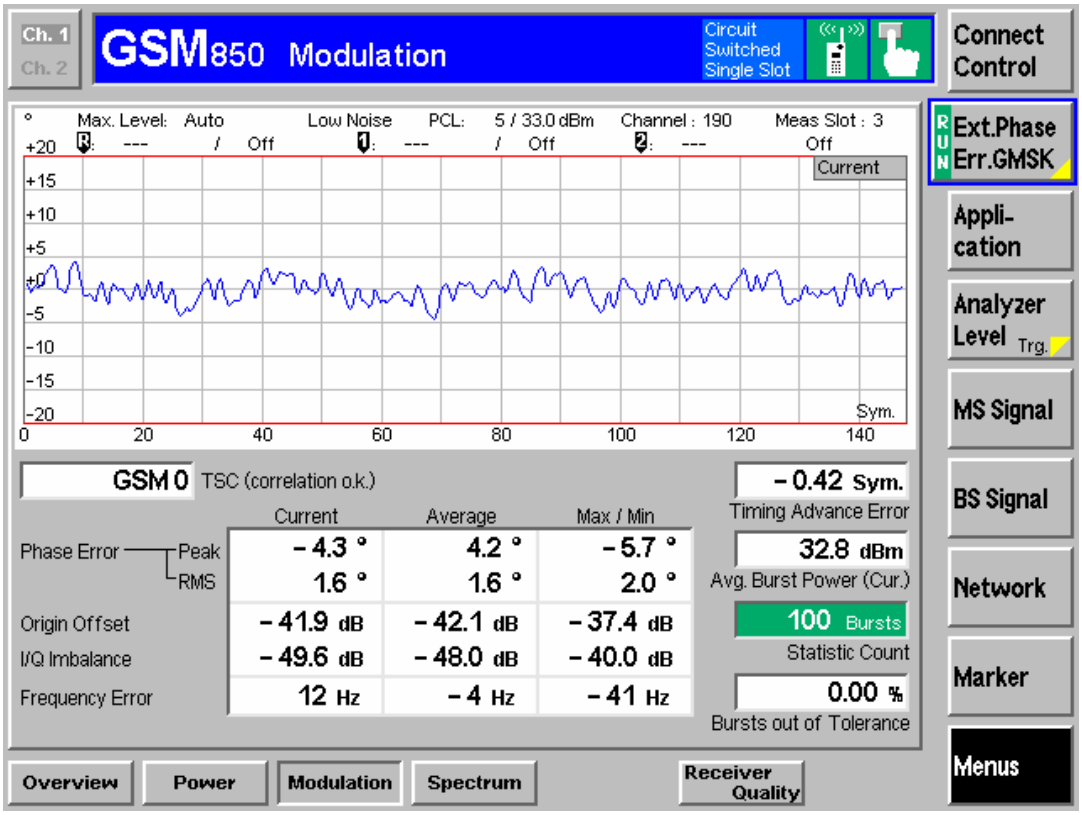
Modulation characteristic:

Channel	Frequency (MHz)	Phase error		Frequency error (Hz)	I/Q offset (dBc)
		rms (°)	peak (°)		
Channel 128	824.2	1.7	4.5	-12	-47.0
Channel 190	836.6	1.6	4.2	-4	-48.0
Channel 251	848.8	1.5	4.0	-3	-48.3

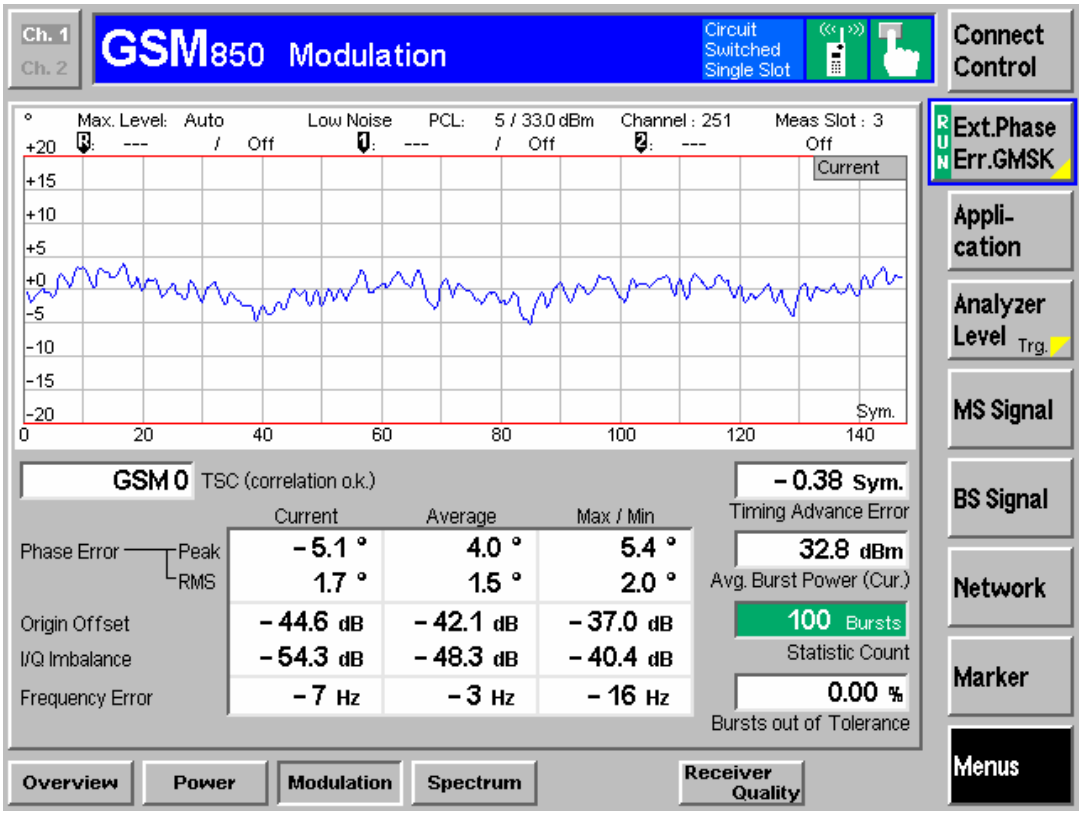
Channel 128



Channel 190:



Channel 251:

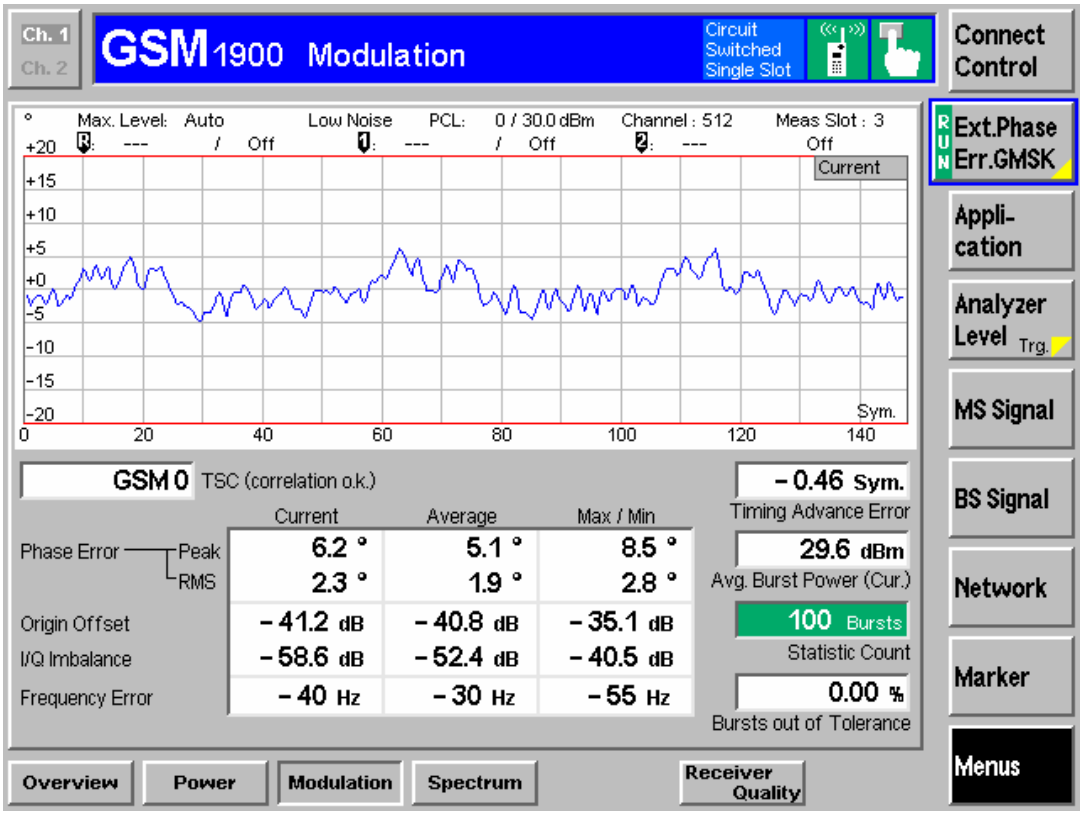


For 1900 MHz

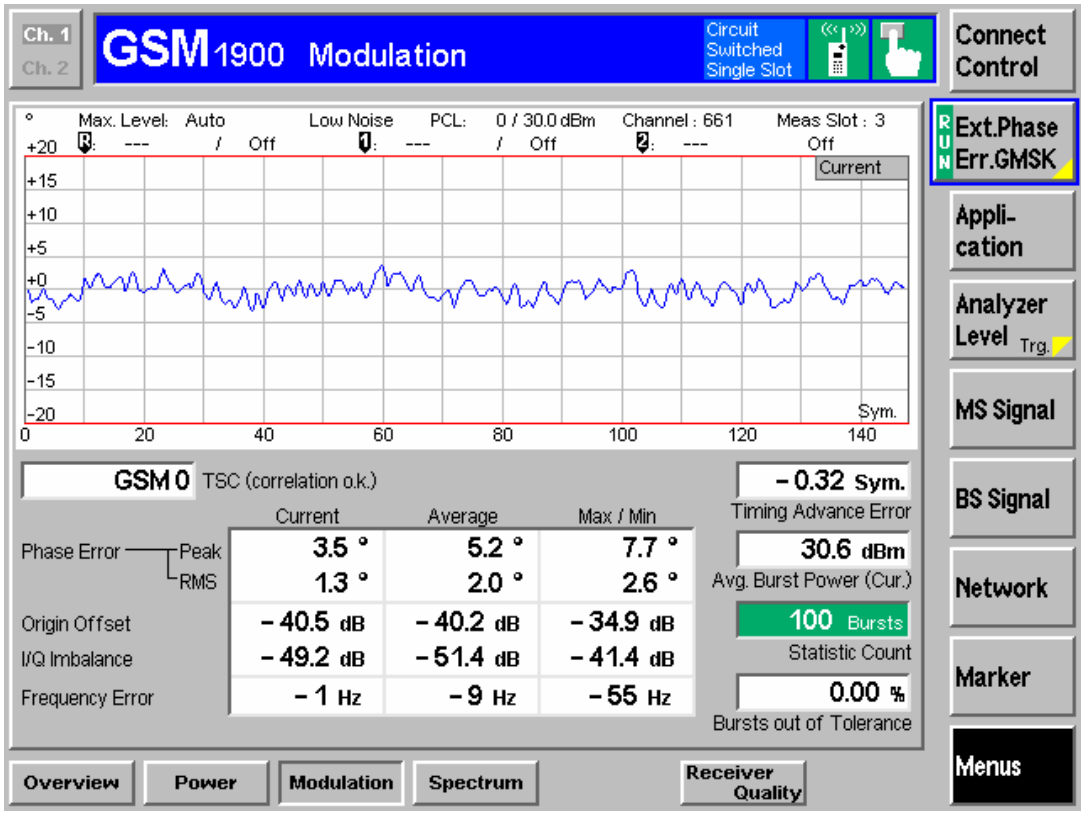
Modulation characteristic:

Channel	Frequency (MHz)	Phase error		Frequency error (Hz)	I/Q offset (dBc)
		rms (°)	peak (°)		
Channel 512	1850.2	1.9	5.1	-30	-52.4
Channel 661	1880.0	2.0	5.2	-9	-51.4
Channel 810	1909.8	2.1	5.3	-9	-51.2

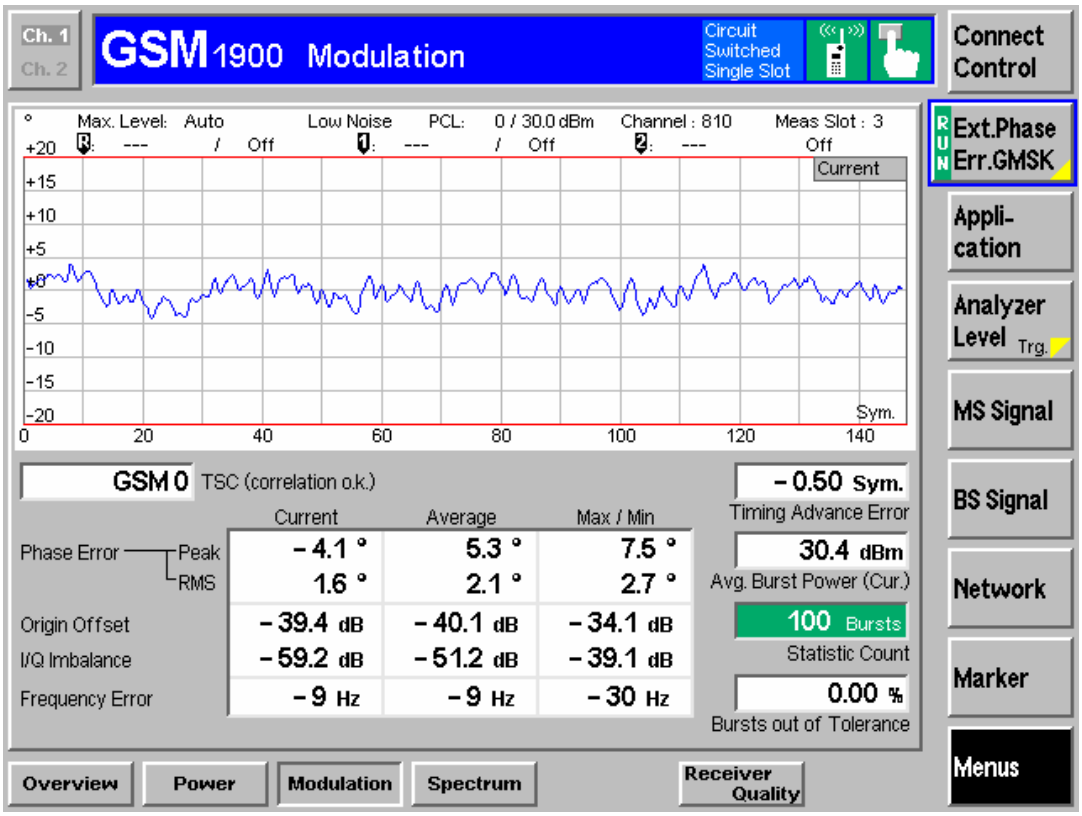
Channel 512



Channel 661



Channel 810



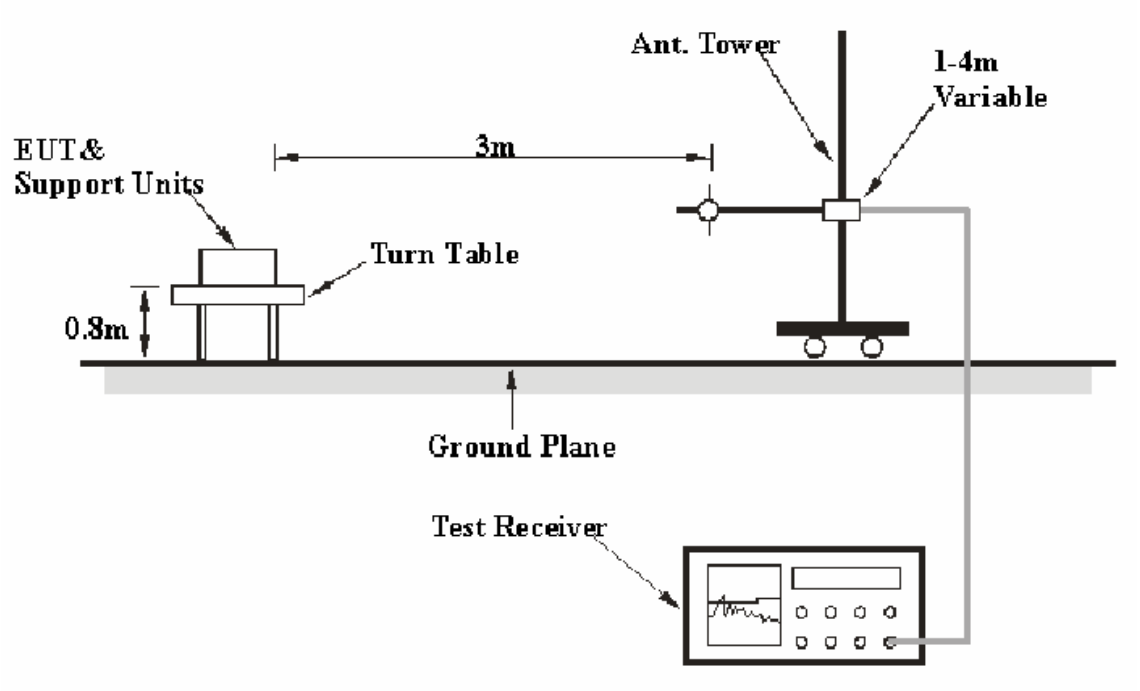
§15.109- RADIATED EMISSIONS

Measurement Uncertainty

All measurements involve certain levels of uncertainties, especially in field of EMC. The factors contributing to uncertainties are spectrum analyzer, cable loss, antenna factor calibration, antenna directivity, antenna factor variation with height, antenna phase center variation, antenna factor frequency interpolation, measurement distance variation, site imperfections, mismatch (average), and system repeatability.

Based on NIS 81, The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of a radiation emissions measurement at Bay Area Compliance Lab Corp. (ShenZhen) is ±4.0 dB.

EUT Setup



The radiated emission tests were performed in the 3-meter Chamber B using the setup accordance with the ANSI C63.4-2003. The specification used was the FCC 15.209(a) limits.

EMI Test Receiver Setup

The system was investigated from 30 MHz to 1000 MHz.

During the radiated emission test, the EMI Test Receiver was set with the following configurations:

Frequency Range	***RBW***	***Video B/W***	***IF B/W***
30 – 1000 MHz	100 kHz	300kHz	120kHz

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	EMI Test Receiver	ESI26	100058	2006-12-04	2007-12-03
R&S	Ultra Broadband Antenna	HL562	100022	2003-03-07	2008-03-06
R&S	Filters	TS-FILT	N/A	N/A	N/A

*** Statement of Traceability**: ZTE Corporation Reliability Test Center is accredited by China National Accreditation Service for conformity Assessment (CNAS), Accredited Program (Lab Code L0611).

Test Procedure

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all installation combinations.

All data was recorded in the PK detection mode.

Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated by adding the Antenna Loss and Cable Loss, and subtracting the Amplifier Gain from the Meter reading. The basic equation is as follows:

Corr. Ampl. =Meter Reading + Antenna Loss+ Cable Loss - Amplifier Gain

The "**Margin**" column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of -7dB means the emission is 7dB below the limit. The equation for margin calculation is as follows:

Margin = Corr. Ampl. –Limit

Test Results Summary

For Unintentional Radiatons:

According to the data in the following table, the EUT complied with the FCC Part 15.109, with the worst margin reading of:

For 850 MHz

-8.99 dB at **121.3652 MHz** in the **Horizontal** polarization, B Channel
-9.99 dB at **121.3627 MHz** in the **Vertical** polarization, M Channel
-9.29 dB at 124.3657 MHz in the **Horizontal** polarization, T Channel.

Test Data

Environmental Conditions

Temperature:	26 °C
Relative Humidity:	47 %
ATM Pressure:	1000 mbar

The testing was performed by Bob Xiong on 2007-11-01, and the data were only for unintentional radiator and be subjected to verification

Test Mode: Transmitting

For 850 MHz

B Channel

INDICATED		TABLE	ANTENNA		TRANSDUCER	FCC Part 15.109	
Frequency MHz	Meter Reading dBμV/m	Angle Degree	Height Meter	Polar H/ V	dB	Limit dBμV/m	Margin dB
121.3652	34.51	274	1	H	-12.9	43.5	-8.99*
31.9439	28.42	36	1	V	-6.4	40.0	-11.58
30.0000	27.38	200	1	H	-5.4	40.0	-12.62

M Channel

INDICATED		TABLE	ANTENNA		TRANSDUCER	FCC Part 15.109	
Frequency	Meter Reading	Angle	Height	Polar		Limit	Margin
MHz	dBμV/m	Degree	Meter	H/ V	dB	dBμV/m	dB
335.1904	23.45	139	1	H	-10.2	46.0	-22.55
121.3627	33.51	274	1	V	-12.9	43.5	-9.99
31.9439	28.42	36	1	V	-6.4	40.0	-11.58
30.0000	27.38	200	1	H	-5.4	40.0	-12.62

T Channel

INDICATED		TABLE	ANTENNA		TRANSDUCER	FCC Part 15.109	
Frequency	Meter Reading	Angle	Height	Polar		Limit	Margin
MHz	dBμV/m	Degree	Meter	H/ V	dB	dBμV/m	dB
30.0000	27.38	200	1	H	-5.4	40.0	-12.62
31.9439	28.42	36	1	V	-6.4	40.0	-11.58
124.3657	34.21	274	1	H	-12.9	43.5	-9.29
335.1904	23.45	139	1	H	-10.2	46.0	-22.55

§2.1053- SPURIOUS RADIATED EMISSIONS

Applicable Standard

Requirements: CFR 47, §2.1053

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	EMI Test Receiver	ESI26	100058	2006-12-04	2007-12-03
R&S	Double-Ridged Waveguide Horn Antenna	HF906	100032	2004-10-10	2009-10-9
R&S	Filters	TS-FILT	N/A	N/A	N/A
Albatross	Anechoic Chamber	3m Site	N/A	2005-07-15	2008-07-14
R&S	Software	ES-K1	N/A	N/A	N/A
R&S	Signal Generator	SMR20	100098	2007-10-17	2008-10-16

*** Statement of Traceability:** Bay Area Compliance Lab Corp. (ShenZhen) attests that all calibrations have been performed in accordance to NVLAP requirements, traceable to the NIST.

Test Procedure

The transmitter was placed on a wooden turntable, and it was transmitting into a non-radiating load, which was also placed on the turntable.

The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and polarization as well as EUT azimuth were varied in order to identify the maximum level of emissions from the EUT .The test was performed by placing the EUT on 3-orthogonal axis.

The frequency range up to teeth harmonic of the fundamental frequency was investigated.

Remove the EUT and replace it with substitution antenna. A signal generator was connected to the substitution antenna by a non-radiating cable. The absolute levels of the spurious emissions were measured by the substitution.

Spurious emissions in dB =10 1g (TXpwr in Watts/0.001)-the absolute level

Spurious attenuation limit in dB =43+10 Log_{10} (power out in Watts)

Test Results Summary

For 850 MHz

Bottom Channel: -28.56 dB at 12484.97 MHz
Middle Channel: -28.07 dB at 12404.309 MHz
Top Channel: -37.95 dB at 5436.8737 MHz

For 1900 MHz

Bottom Channel: -24.75 dB at 19661.323 MHz
Middle Channel: -28.85 dB at 18436.874 MHz
Top Channel: -24.72 dB at 19947.896 MHz

Test Data

Environmental Conditions

Temperature:	18 °C
Relative Humidity:	53 %
ATM Pressure:	1009 mbar

The testing was performed by Bob Xiong on 2007-11-01

Test Mode: Transmitting

For 850 MHz

Indicated		Table	Test Antenna		Substituted			Antenna	Cable	Absolute	Limit	Margin
Frequency MHz	Meter Reading dBuV/m	Angle Degree	Height Meter	Polar H/V	Frequency MHz	Level dBm	Polar H/V	Gain Correction dBi	Loss dB	Level dBm	dBm	dB
Bottom Channel												
12484.97	57.4	180	1.2	V	12484.97	-43.71	V	12.05	9.9	-41.56	-13.00	-28.56
6158.3166	51.56	60	1.2	H	6158.3166	-51.83	H	9.05	6.9	-49.68	-13.00	-36.68
10618.236	55.92	45	1.0	H	10618.236	-53.18	H	11.75	9.1	-50.53	-13.00	-37.53
1733.4669	38.66	0	1.0	V	1733.4669	-57.94	V	6.55	3.5	-54.89	-13.00	-41.89
8705.4108	53.8	270	1.0	V	8705.4108	-57.22	V	9.65	8.3	-55.87	-13.00	-42.87
3645.2906	44.34	45	1.2	V	3645.2906	-60.49	V	7.75	5	-57.74	-13.00	-44.74
3152.3046	42.67	45	1.2	H	3152.3046	-61.44	H	7.75	4.7	-58.39	-13.00	-45.39
1649.2986	37.27	180	1.2	H	1649.2986	-68.05	H	6.55	3.4	-64.9	-13.00	-51.90
1144.2886	35.31	90	1.2	H	1144.2886	-70.49	H	4.25	2.8	-69.04	-13.00	-56.04
1264.5291	35.2	45	1.0	V	1264.5291	-70.45	V	4.25	3	-69.2	-13.00	-56.2
Middle Channel												
12404.309	57.89	270	1.2	V	12404.309	-43.22	V	12.05	9.9	-41.07	-13.00	-28.07
6134.2685	51.67	238	1.0	H	6134.2685	-51.72	H	9.05	6.8	-49.47	-13.00	-36.47
3525.0501	45.92	60	1.0	H	3525.0501	-57.34	H	7.75	5	-54.59	-13.00	-41.59
6182.3647	51.79	115	1.0	V	6182.3647	-57.26	V	9.05	6.9	-55.11	-13.00	-42.11
2310.6212	39.37	300	1.0	V	2310.6212	-63.85	V	7.05	4.1	-60.9	-13.00	-47.90
2334.6693	39.97	220	1.0	H	2334.6693	-65.23	H	7.05	4.1	-62.28	-13.00	-49.28
1625.2505	36.88	125	1.2	V	1625.2505	-70.99	V	6.55	3.4	-67.84	-13.00	-54.84
1661.3226	37.01	158	1.2	H	1661.3226	-74.56	H	6.55	3.4	-71.41	-13.00	-58.41
Top Channel												
5436.8737	47.7	263	1.2	H	5436.8737	-53.2	H	8.55	6.3	-50.95	-13.00	-37.95
10445.391	55.21	124	1.2	H	10445.391	-53.73	H	11.35	9.1	-51.48	-13.00	-38.48
8705.4108	53.82	120	1.0	H	8705.4108	-54.15	H	9.65	8.3	-52.8	-13.00	-39.80
8728.4569	54.1	168	1.0	V	8728.4569	-55.28	V	9.65	8.3	-53.93	-13.00	-40.93
6158.3166	51.05	309	1.0	V	6158.3166	-56.42	V	9.05	6.9	-54.27	-13.00	-41.27
4559.1182	44.59	162	1.0	H	4559.1182	-58.84	H	9.15	5.7	-55.39	-13.00	-42.39
3140.2806	42.33	125	1.0	V	3140.2806	-58.64	V	7.75	4.7	-55.59	-13.00	-42.59
5400.8016	47.59	321	1.0	V	5400.8016	-59.04	V	8.55	6.3	-56.79	-13.00	-43.79
2671.3427	41.44	238	1.2	H	2671.3427	-63.3	H	7.95	4.4	-59.75	-13.00	-46.75
2659.3186	40.94	98	1.0	V	2659.3186	-66.59	V	7.95	4.3	-62.94	-13.00	-49.94
1637.2745	37.25	47	2.0	V	1637.2745	-70.62	V	6.55	3.4	-67.47	-13.00	-54.47

For 1900 MHz

Indicated		Table	Test Antenna		Substituted			Antenna	Cable	Absolute	Limit	Margin
Frequency MHz	Meter Reading dBuV/m	Angle Degree	Height Meter	Polar H/V	Frequency MHz	Level dBm	Polar H/V	Gain Correction dBi	Loss dB	Level dBm	dBm	dB
Bottom Channel												
19661.323	70.02	45	1.0	H	19661.323	-32	H	6.45	12.2	-37.75	-13.00	-24.75
18098.196	70.43	270	1.0	V	18098.196	-38	V	6.45	12.2	-43.70	-13.00	-30.70
14529.058	64.95	45	1.0	H	14529.058	-42.3	H	9.15	11	-44.15	-13.00	-31.15
6158.3166	52.57	60	1.2	H	6158.3166	-50.82	H	9.05	6.9	-48.67	-13.00	-35.67
14555.11	64.3	45	1.2	V	14555.11	-47.16	V	9.15	11	-49.01	-13.00	-36.01
6158.3166	53.03	0	1.0	V	6158.3166	-54.44	V	9.05	6.9	-52.29	-13.00	-39.29
2647.2946	41.42	45	1.2	H	2647.2946	-63.8	H	7.95	4.3	-60.15	-13.00	-47.15
1805.6112	38.66	180	1.2	H	1805.6112	-64.67	H	6.55	3.6	-61.72	-13.00	-47.72
1817.6353	38.61	45	1.0	V	1817.6353	-67.91	V	6.55	3.6	-64.96	-13.00	-51.96
1372.7455	36.11	90	1.2	H	1372.7455	-69.99	H	4.25	3.1	-68.84	-13.00	-55.84
Middle Channel												
18436.874	69.8	97	1.2	H	18436.874	-36.1	H	6.45	12.2	-41.85	-13.00	-28.85
5965.9319	51.58	60	1.0	H	5965.9319	-47.03	H	9.05	6.7	-44.68	-13.00	-31.68
18254.509	69.88	180	1.0	V	18254.509	-40.2	V	6.45	12.2	45.95	-13.00	-32.95
13382.766	60.85	238	1.0	H	13382.766	-50.6	H	11.85	10.2	-48.95	-13.00	-35.95
14555.11	63.96	90	1.0	V	14555.11	-47.5	V	9.15	11	-49.35	-13.00	-36.35
3296.5932	43.11	270	1.2	V	3296.5932	-57.86	V	7.75	4.8	-54.91	-13.00	-41.91
1733.4669	38.09	300	1.0	V	1733.4669	-58.51	V	6.55	3.5	-55.46	-13.00	-42.46
2659.3186	41.36	220	1.0	H	2659.3186	-63.38	H	7.95	4.3	-59.73	-13.00	-46.73
2635.2705	41.86	115	1.0	V	2635.2705	-65.67	V	7.95	4.3	-62.12	-13.00	-49.12
1709.4188	38.65	158	1.2	H	1709.4188	-66.58	H	6.55	3.5	-63.53	-13.00	-50.53
1444.8898	36.46	125	1.2	V	1444.8898	-77.03	V	4.25	3.2	-75.98	-13.00	-62.98
Top Channel												
19947.896	70.05	228	1.0	H	19947.896	-31.97	H	6.45	12.2	-37.72	-13.00	-24.72
18150.301	70.08	168	1.0	V	18150.301	-40	V	6.45	12.2	-45.75	-13.00	-32.75
14633.267	64.02	124	1.2	H	14633.267	-44.89	H	9.15	11	-46.74	-13.00	-33.74
14633.267	64.56	309	1.0	V	14633.267	-45.9	V	9.15	11	-47.75	-13.00	-34.75
3200.4008	42.84	321	1.0	V	3200.4008	-58.13	V	7.75	4.8	-55.35	-13.00	-42.35
3224.4489	43.67	120	1.0	H	3224.4489	-60.44	H	7.75	4.8	-57.49	-13.00	-44.49
2683.3667	41.64	263	1.2	H	2683.3667	-63.1	H	7.95	4.4	-59.55	-13.00	-46.55
2647.2946	41.86	125	1.0	V	2647.2946	-65.67	V	7.95	4.3	-62.02	-13.00	-49.02
1769.5391	38.88	98	1.0	V	1769.5391	-67.64	V	6.55	3.5	-64.59	-13.00	-51.59
1432.8657	36.06	238	1.2	H	1432.8657	-70.04	H	4.25	3.2	-68.99	-13.00	-55.99
1661.3226	38.36	162	1.0	H	1661.3226	-73.21	H	6.55	3.4	-70.06	-13.00	-57.06
1456.9138	36.62	47	2.0	V	1456.9138	-76.87	V	4.25	3.2	-75.82	-13.00	-62.82

§2.1051, §22.917(a), §24.238(a)- SPURIOUS EMISSIONS AT ANTENNA TERMINALS

Applicable Standard

Requirements: CFR 47§ 2.1051, §22.917(a), and §24.238(a)

The spectrum was to be investigated to the tenth harmonics of the highest fundamental frequency as specified in §2.1057

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Agilent	Spectrum analyzer	E4405B	MY41440292	2007-01-18	2008-01-18
Guangzhou Jiesai	Coupling	10+2dB	\	\	\
R&S	UNIVERSAL RADIO COMMUNICATION TESTER	CMU200	110325	2007-01-18	2008-01-18

*** Statement of Traceability**: ZTE Corporation Reliability Test Center is accredited by China National Accreditation Service for conformity Assessment (CNAS), Accredited Program (Lab Code L0611).

Test Procedure

The RF terminal of the EUT was connected to the RF terminal of the CMU200. The RF terminal of the EUT was connected to a spectrum analyzer through the coupling.

Test Data

Environmental Conditions

Temperature:	18 °C
Relative Humidity:	53 %
ATM Pressure:	1009 mbar

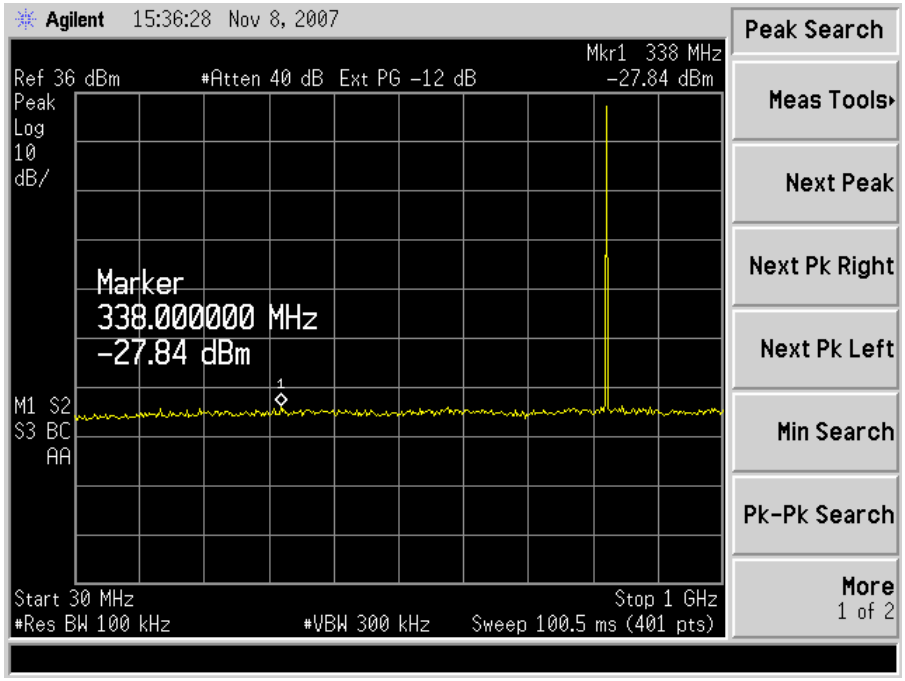
The testing was performed by LIUKE on 2007-11-8

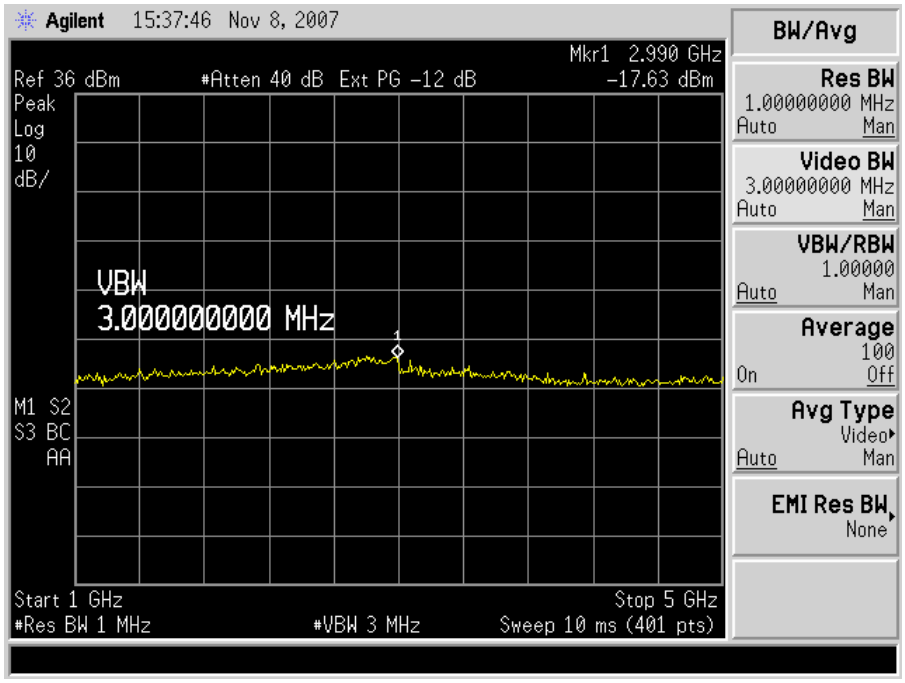
Test Result: Pass

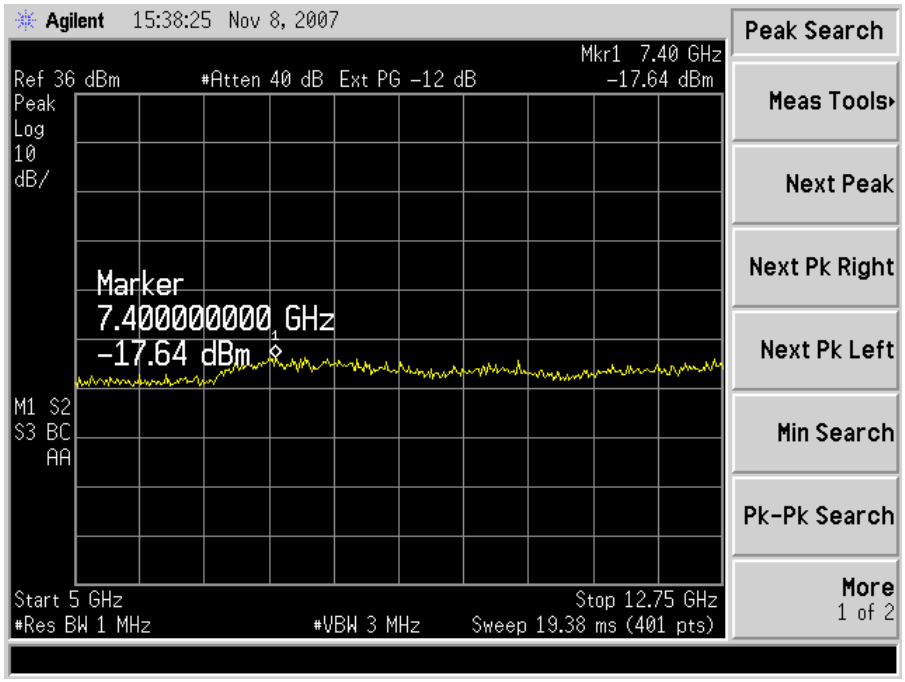
Test Mode: Transmitting

For 850 MHz

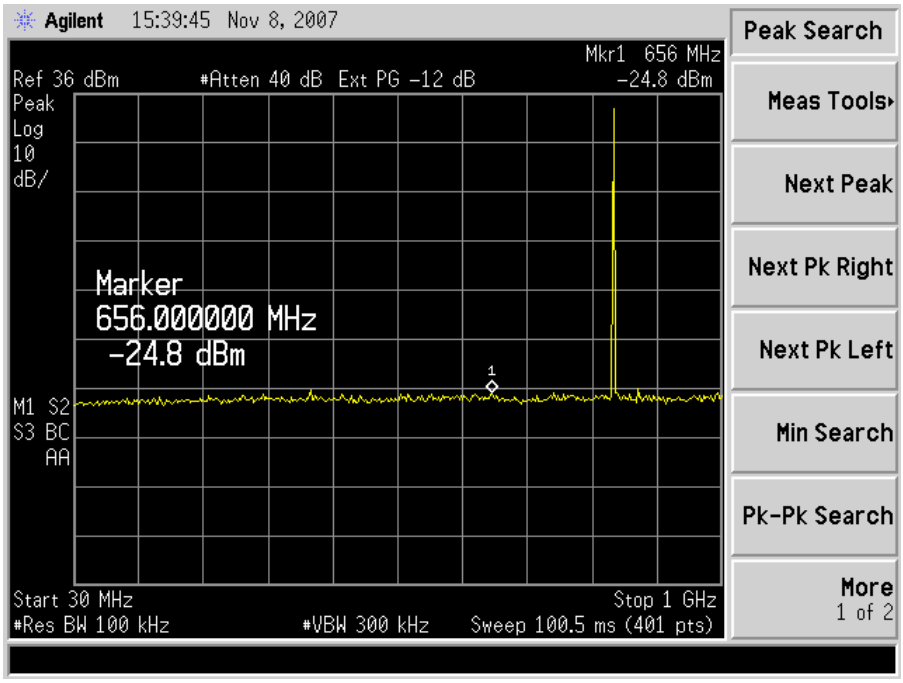
Channel 128

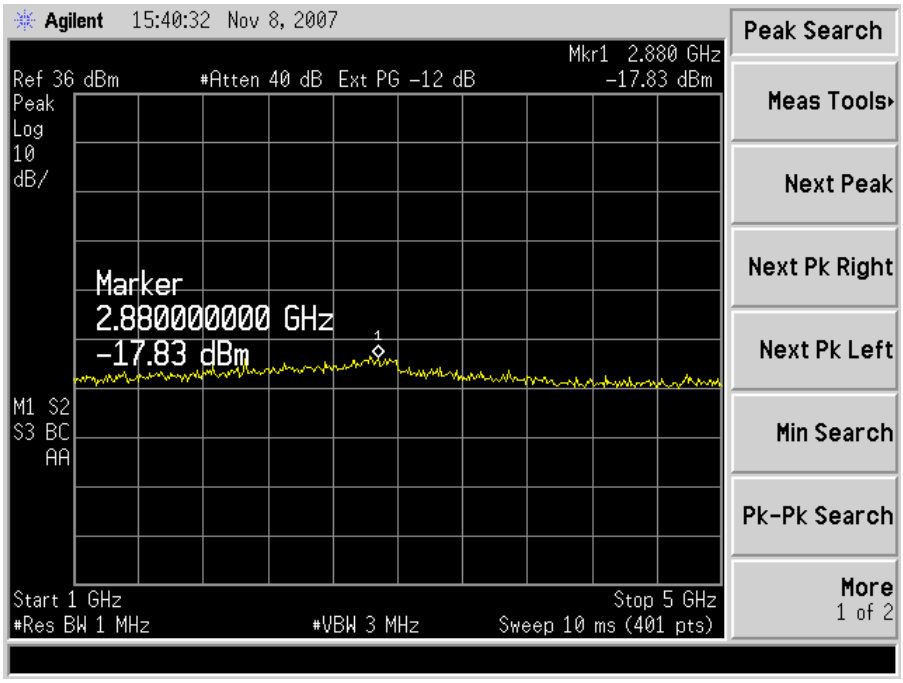


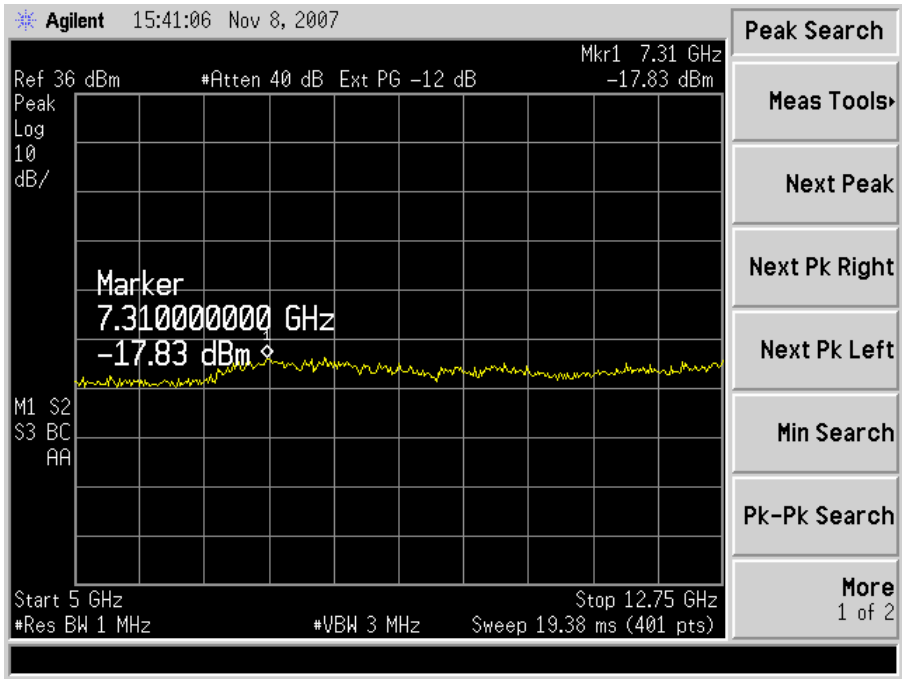



Agilent 15:38:25 Nov 8, 2007
Mkr1 7.40 GHz
Ref 36 dBm #Atten 40 dB Ext PG -12 dB -17.64 dBm
Peak
Log
10
dB/
Marker
7.400000000 GHz
-17.64 dBm
M1 S2
S3 BC
AA
Start 5 GHz
#Res BW 1 MHz
#VBW 3 MHz
Stop 12.75 GHz
Sweep 19.38 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

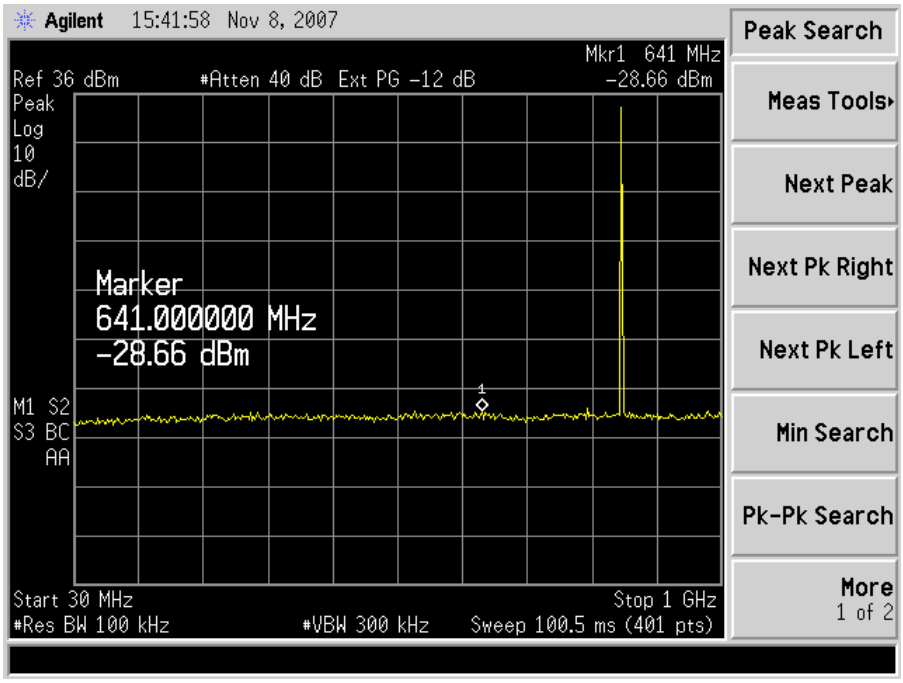
Channel 190

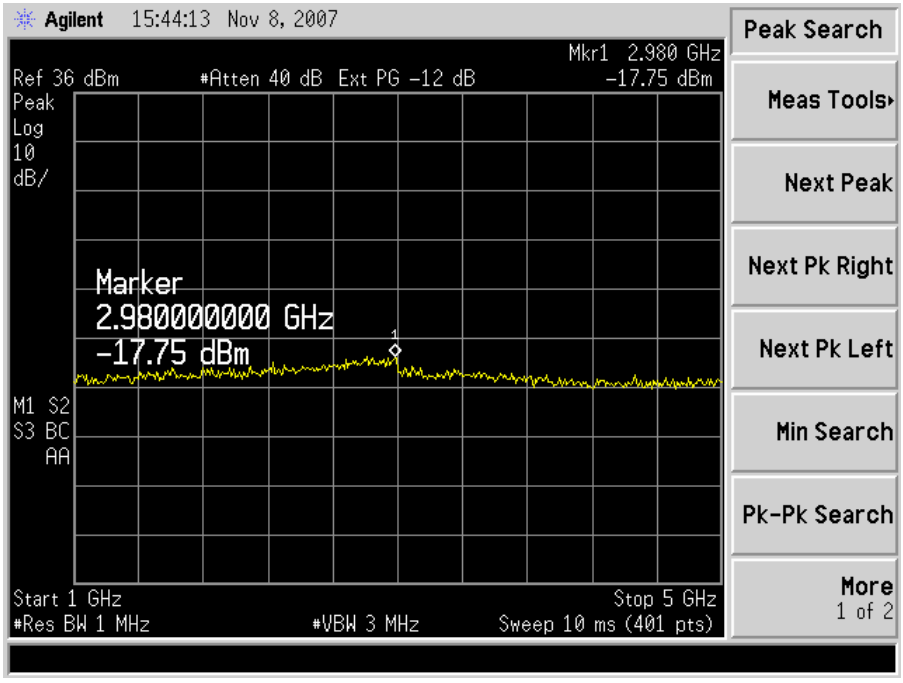

Agilent 15:39:45 Nov 8, 2007
Mkr1 656 MHz
Ref 36 dBm #Atten 40 dB Ext PG -12 dB -24.8 dBm
Peak
Log
10
dB/
Marker
656.000000 MHz
-24.8 dBm
M1 S2
S3 BC
AA
Start 30 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1 GHz
Sweep 100.5 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

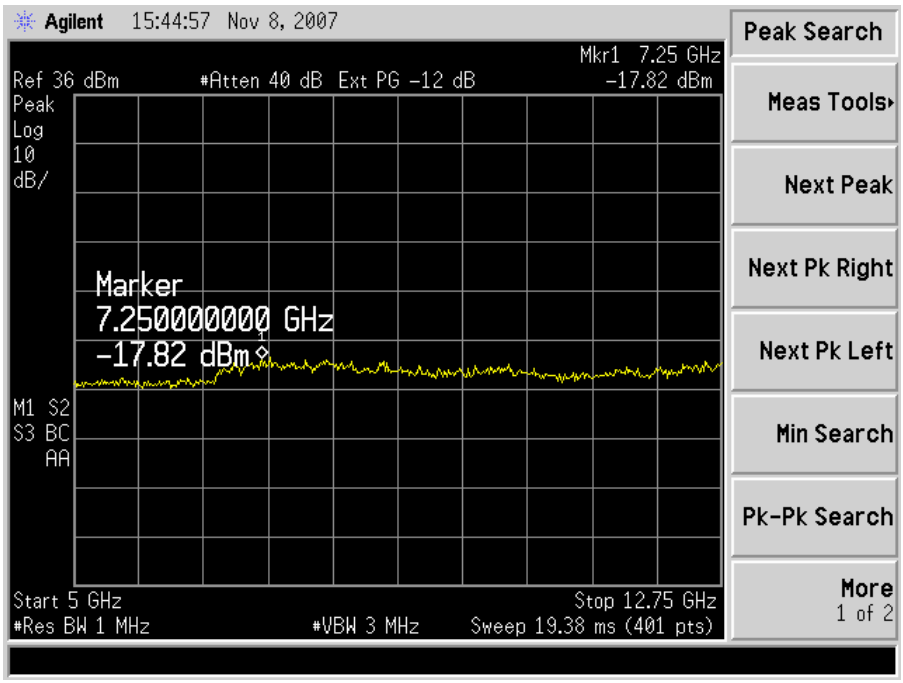

Agilent 15:40:32 Nov 8, 2007
Mkr1 2.880 GHz
Ref 36 dBm #Atten 40 dB Ext PG -12 dB -17.83 dBm
Peak
Log
10
dB/
Marker
2.880000000 GHz
-17.83 dBm
M1 S2
S3 BC
AA
Start 1 GHz
#Res BW 1 MHz
#VBW 3 MHz
Stop 5 GHz
Sweep 10 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2


Agilent 15:41:06 Nov 8, 2007
Mkr1 7.31 GHz
Ref 36 dBm #Atten 40 dB Ext PG -12 dB -17.83 dBm
Peak
Log
10
dB/
Marker
7.310000000 GHz
-17.83 dBm
M1 S2
S3 BC
AA
Start 5 GHz
#Res BW 1 MHz
#VBW 3 MHz
Stop 12.75 GHz
Sweep 19.38 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

Channel 251

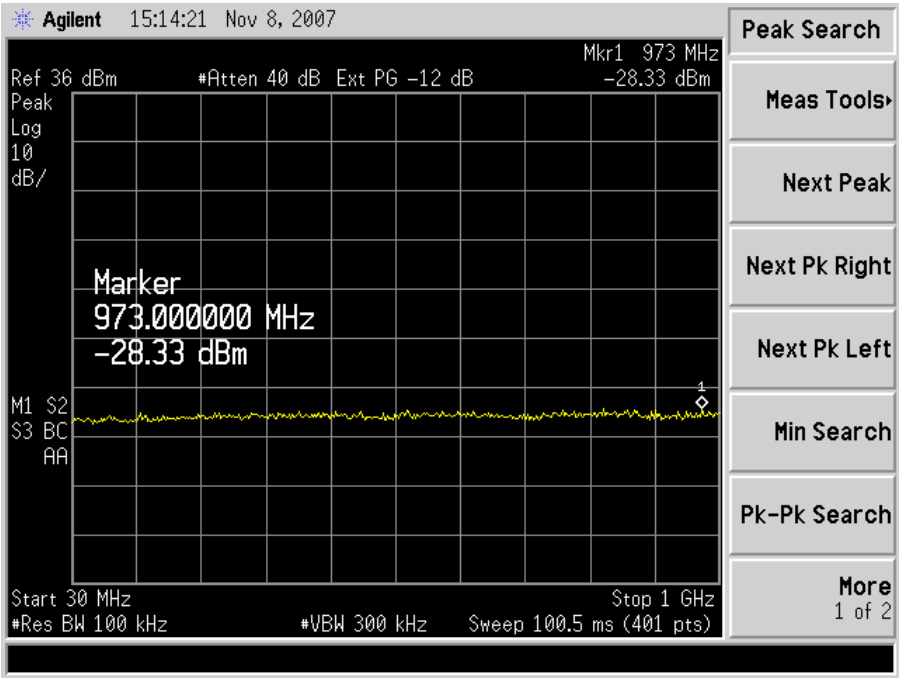

Agilent 15:41:58 Nov 8, 2007
Mkr1 641 MHz
Ref 36 dBm #Atten 40 dB Ext PG -12 dB -28.66 dBm
Peak
Log
10
dB/
Marker
641.000000 MHz
-28.66 dBm
M1 S2
S3 BC
AA
Start 30 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1 GHz
Sweep 100.5 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

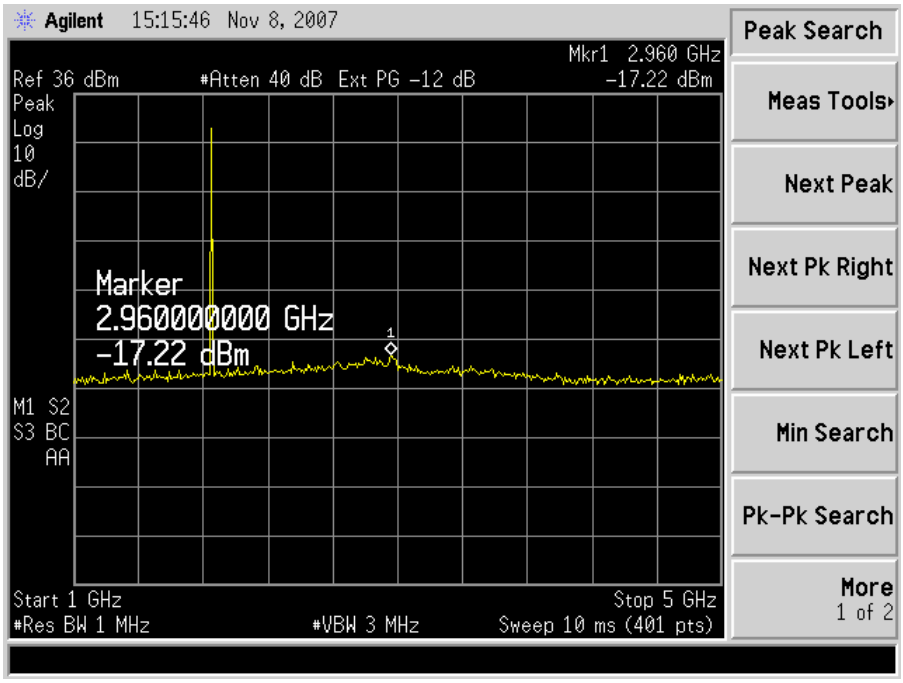

Agilent 15:44:13 Nov 8, 2007
Mkr1 2.980 GHz
Ref 36 dBm #Atten 40 dB Ext PG -12 dB -17.75 dBm
Peak
Log
10
dB/
Marker
2.980000000 GHz
-17.75 dBm
M1 S2
S3 BC
AA
Start 1 GHz
#Res BW 1 MHz
#VBW 3 MHz
Stop 5 GHz
Sweep 10 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

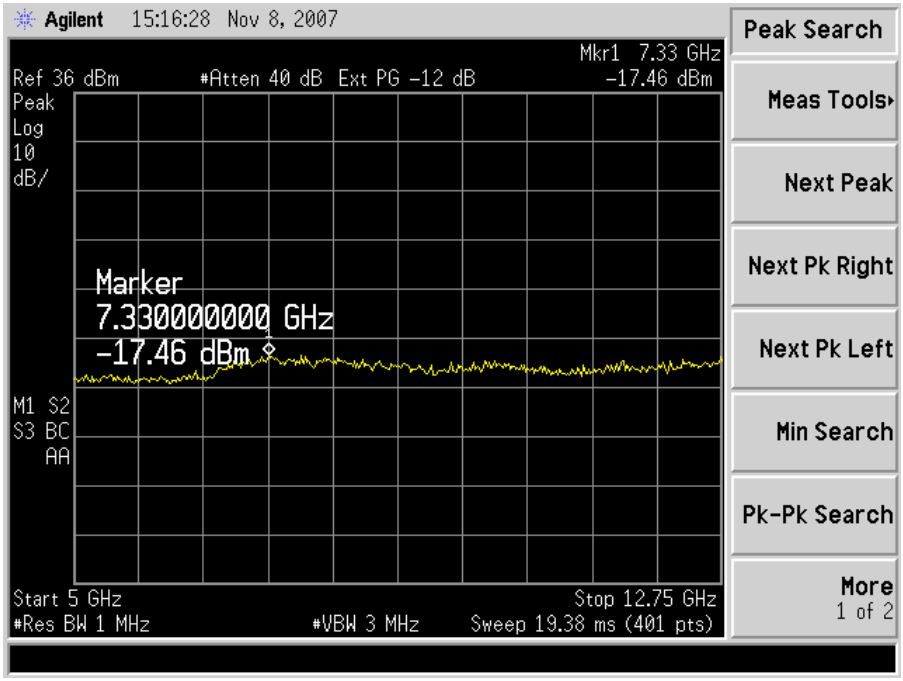


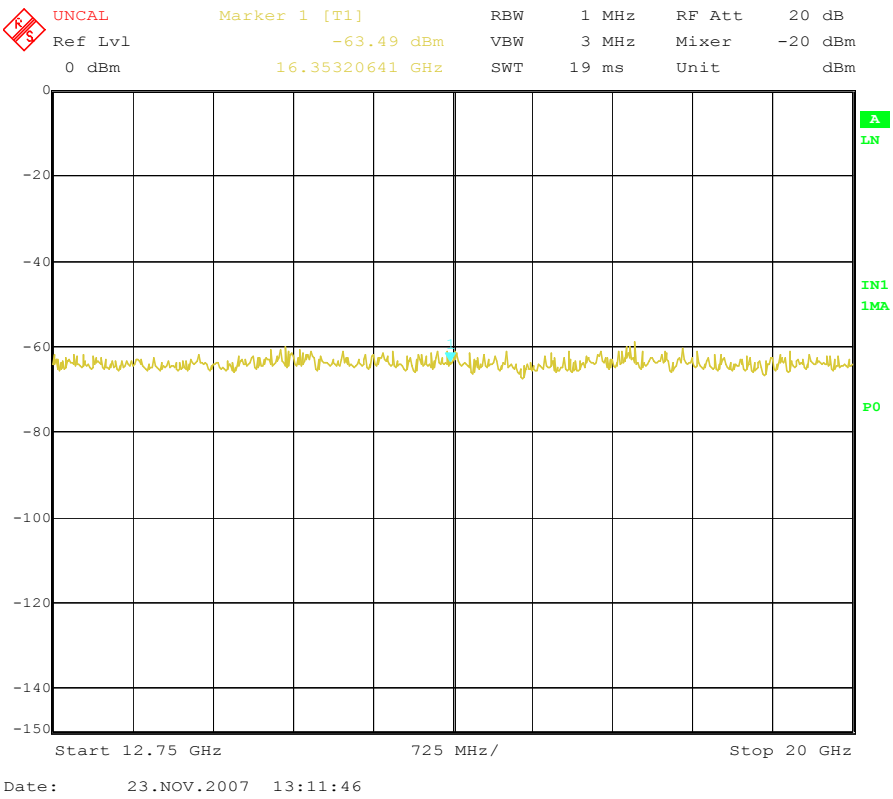
For 1900 MHz

Channel 512

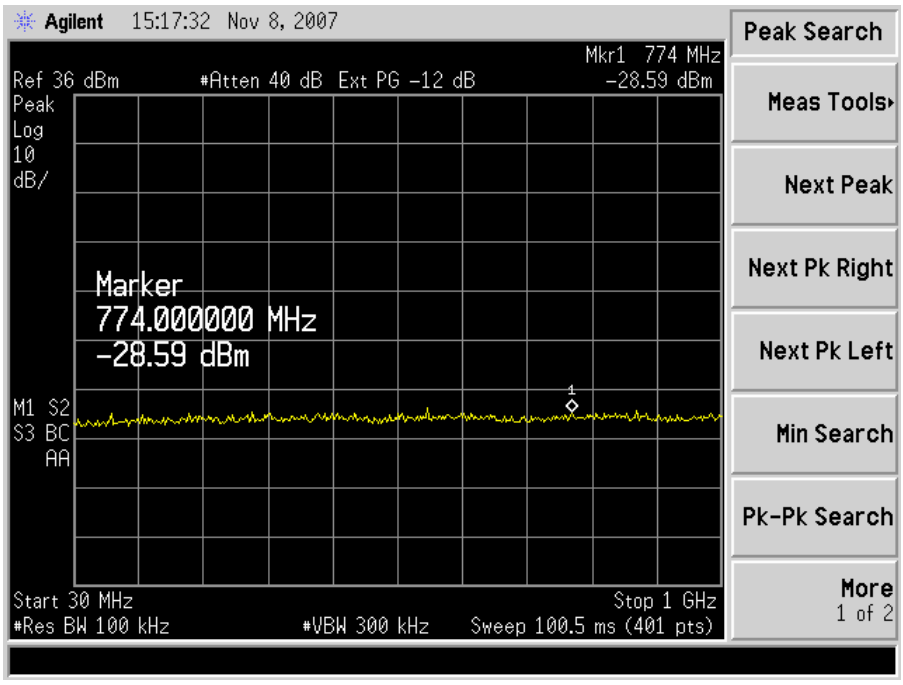


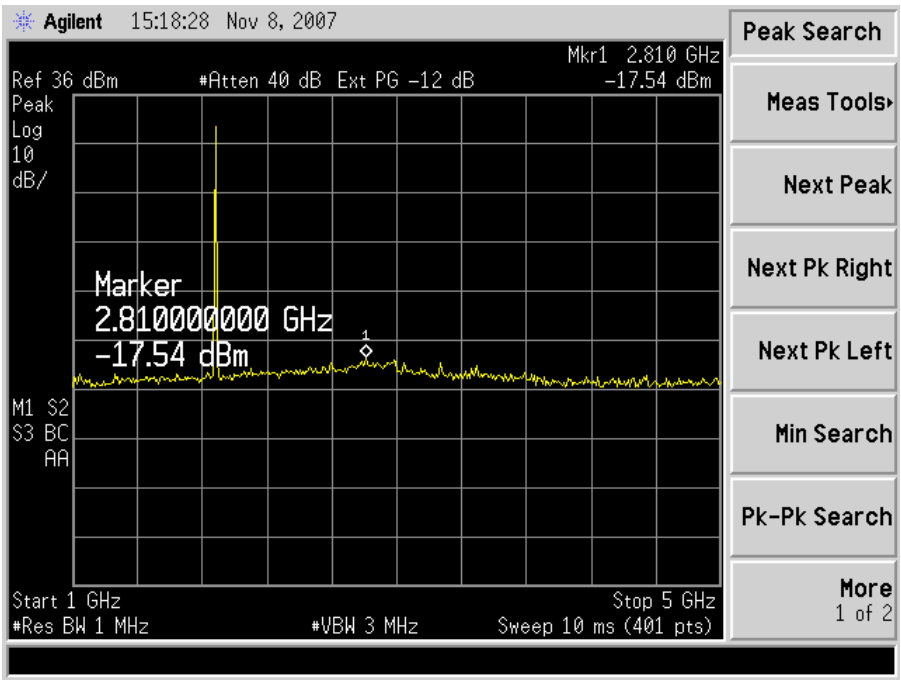

Agilent 15:15:46 Nov 8, 2007
Mkr1 2.960 GHz
Ref 36 dBm #Atten 40 dB Ext PG -12 dB -17.22 dBm
Peak
Log
10
dB/
Marker
2.960000000 GHz
-17.22 dBm
M1 S2
S3 BC
AA
Start 1 GHz
#Res BW 1 MHz
#VBW 3 MHz
Stop 5 GHz
Sweep 10 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

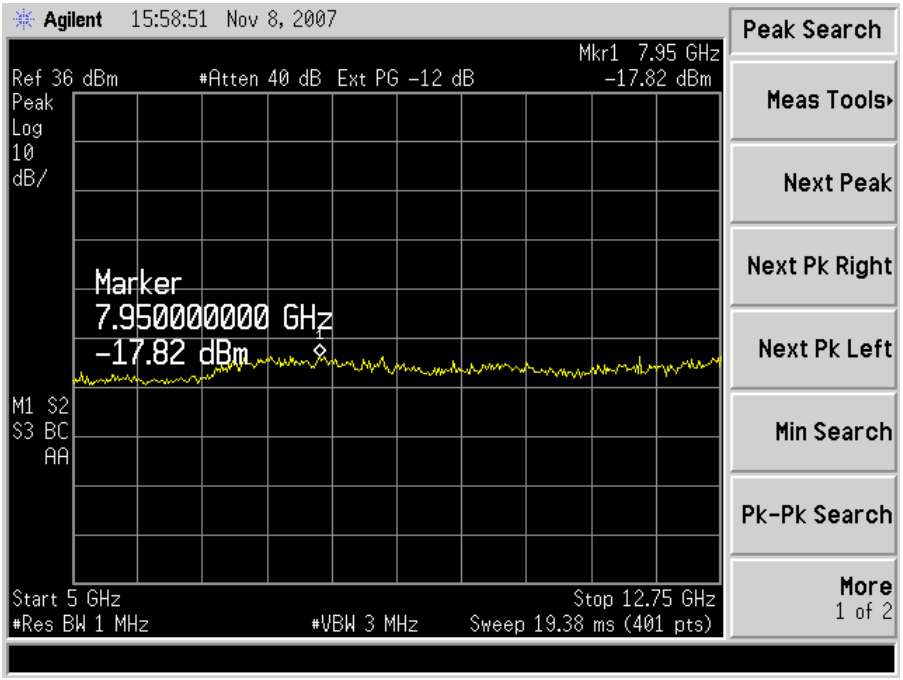

Agilent 15:16:28 Nov 8, 2007
Mkr1 7.33 GHz
Ref 36 dBm #Atten 40 dB Ext PG -12 dB -17.46 dBm
Peak
Log
10
dB/
Marker
7.330000000 GHz
-17.46 dBm
M1 S2
S3 BC
AA
Start 5 GHz
#Res BW 1 MHz
#VBW 3 MHz
Stop 12.75 GHz
Sweep 19.38 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

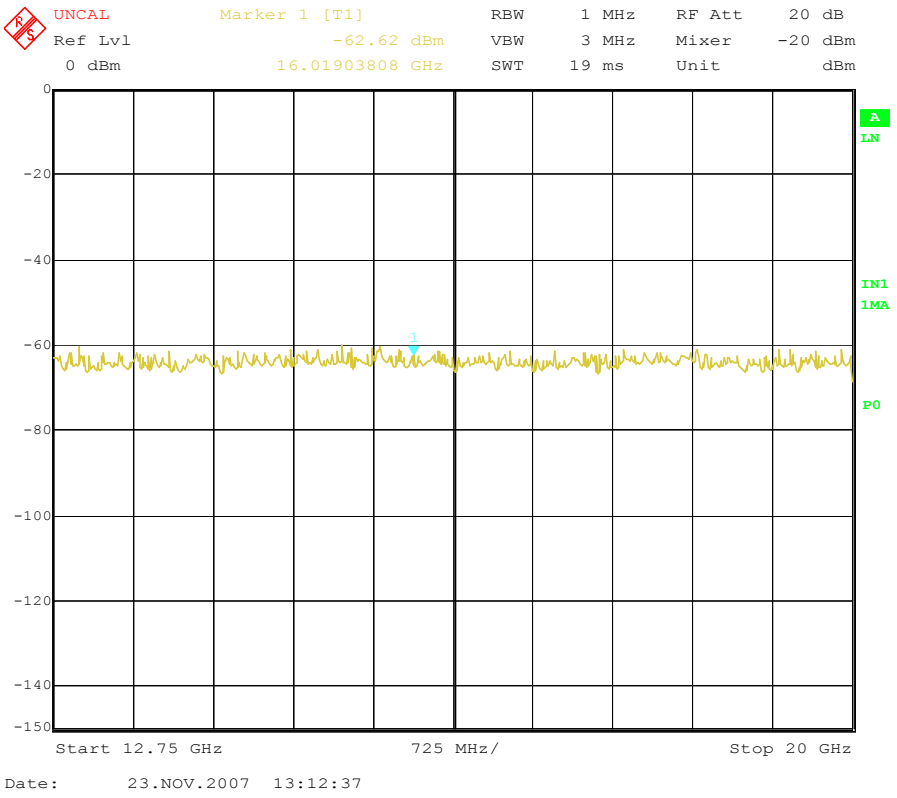

UNCAL
Marker 1 [T1]
RBW 1 MHz
RF Att 20 dB
Ref Lvl
-63.49 dBm
VBW 3 MHz
Mixer -20 dBm
0 dBm
16.35320641 GHz
SWT 19 ms
Unit dBm
0
-20
-40
-60
-80
-100
-120
-140
-150
A
LN
IN1
1MA
P0
Start 12.75 GHz
725 MHz/
Stop 20 GHz
Date: 23.NOV.2007 13:11:46

Channel 661

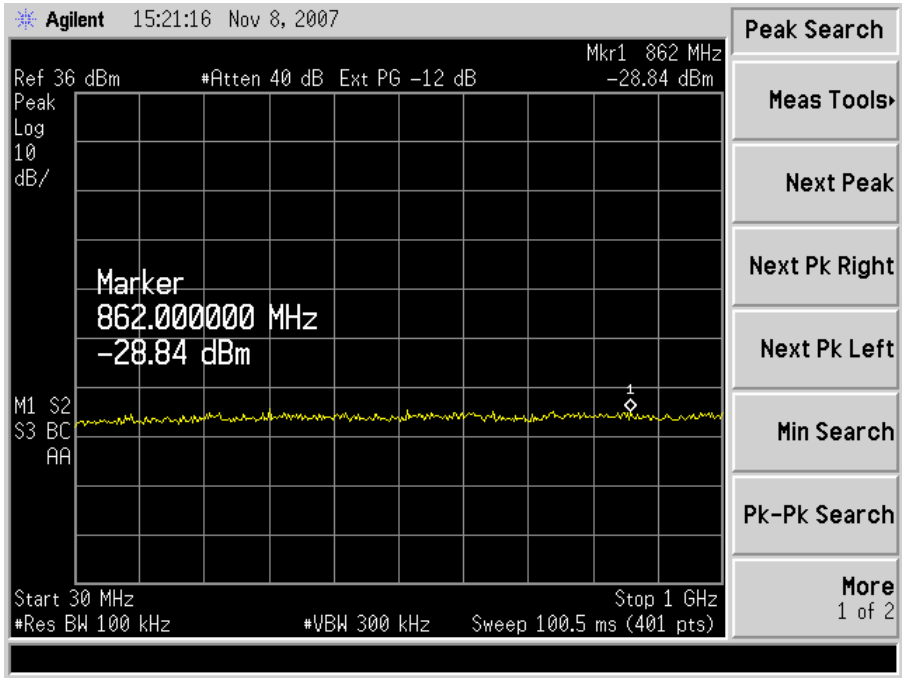

Agilent 15:17:32 Nov 8, 2007
Mkr1 774 MHz
Ref 36 dBm
#Atten 40 dB Ext PG -12 dB
-28.59 dBm
Peak
Log
10
dB/
Marker
774.000000 MHz
-28.59 dBm
M1 S2
S3 BC
AA
Start 30 MHz
Stop 1 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 100.5 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

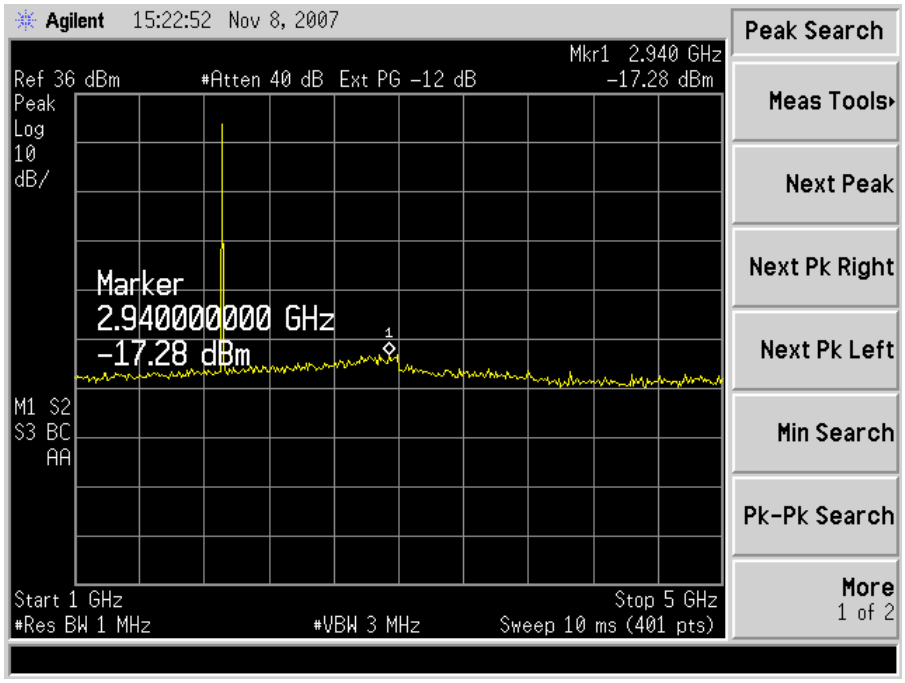

Agilent 15:18:28 Nov 8, 2007
Mkr1 2.810 GHz
Ref 36 dBm #Atten 40 dB Ext PG -12 dB -17.54 dBm
Peak
Log
10
dB/
Marker
2.810000000 GHz
-17.54 dBm
M1 S2
S3 BC
AA
Start 1 GHz
#Res BW 1 MHz
#VBW 3 MHz
Stop 5 GHz
Sweep 10 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

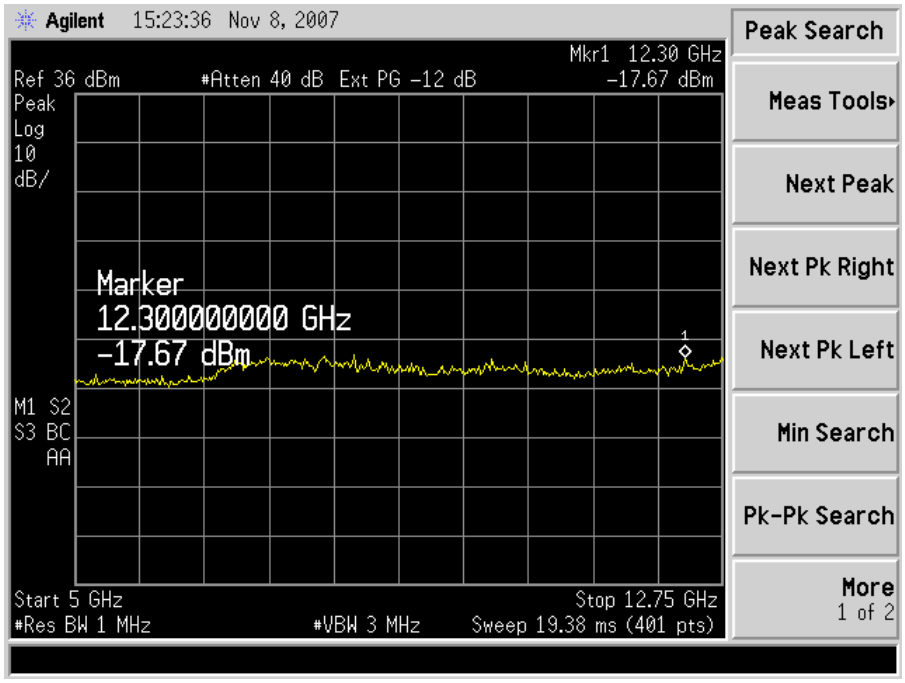

Agilent 15:58:51 Nov 8, 2007
Mkr1 7.95 GHz
Ref 36 dBm
#Atten 40 dB Ext PG -12 dB
-17.82 dBm
Peak
Log
10
dB/
Marker
7.950000000 GHz
-17.82 dBm
M1 S2
S3 BC
AA
Start 5 GHz
#Res BW 1 MHz
#VBW 3 MHz
Stop 12.75 GHz
Sweep 19.38 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

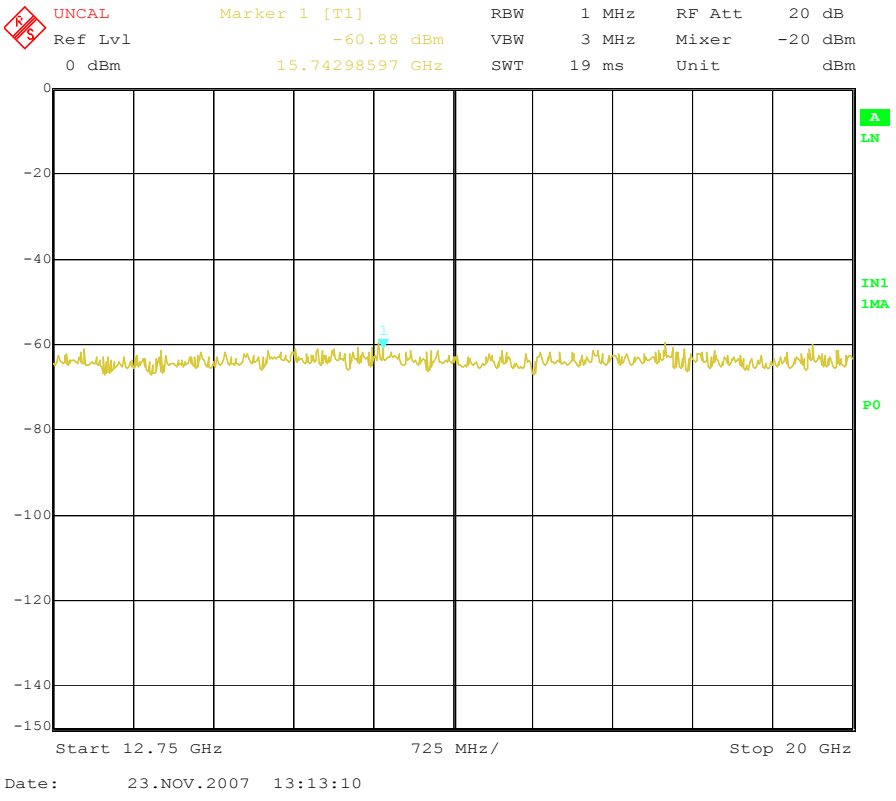

UNCAL
Marker 1 [T1]
RBW 1 MHz
RF Att 20 dB
Ref Lvl
-62.62 dBm
VBW 3 MHz
Mixer -20 dBm
0 dBm
16.01903808 GHz
SWT 19 ms
Unit dBm
0
-20
-40
-60
-80
-100
-120
-140
-150
A
LN
IN1
1MA
PO
Start 12.75 GHz
725 MHz/
Stop 20 GHz
Date: 23.NOV.2007 13:12:37

Channel 810


Agilent 15:21:16 Nov 8, 2007
Mkr1 862 MHz
Ref 36 dBm #Atten 40 dB Ext PG -12 dB -28.84 dBm
Peak
Log
10
dB/
Marker
862.000000 MHz
-28.84 dBm
M1 S2
S3 BC
AA
Start 30 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1 GHz
Sweep 100.5 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2


Agilent 15:22:52 Nov 8, 2007
Mkr1 2.940 GHz
Ref 36 dBm #Atten 40 dB Ext PG -12 dB -17.28 dBm
Peak
Log
10
dB/
Marker
2.940000000 GHz
-17.28 dBm
M1 S2
S3 BC
AA
Start 1 GHz
#Res BW 1 MHz
#VBW 3 MHz
Stop 5 GHz
Sweep 10 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2


Agilent 15:23:36 Nov 8, 2007
Mkr1 12.30 GHz
Ref 36 dBm
#Atten 40 dB Ext PG -12 dB
-17.67 dBm
Peak
Log
10
dB/
Marker
12.300000000 GHz
-17.67 dBm
M1 S2
S3 BC
AA
Start 5 GHz
#Res BW 1 MHz
#VBW 3 MHz
Stop 12.75 GHz
Sweep 19.38 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2


UNCAL
Marker 1 [T1]
RBW 1 MHz
RF Att 20 dB
Ref Lvl
-60.88 dBm
VBW 3 MHz
Mixer -20 dBm
0 dBm
15.74298597 GHz
SWT 19 ms
Unit dBm
0
-20
-40
-60
-80
-100
-120
-140
-150
A
LN
IN1
1MA
PO
Start 12.75 GHz
725 MHz/
Stop 20 GHz
Date: 23.NOV.2007 13:13:10

§2.1049, §22.905, §22.917, §24.238-OCCUPIED BANDWIDTH

Applicable Standard

Requirements: CFR 47, § 2.1049, § 22.905 and § 22.917and § 24.238.

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Agilent	Spectrum analyzer	E4405B	MY41440292	2007-01-18	2008-01-18
Guangzhou Jiesai	Coupling	30dB	\	\	\
R&S	UNIVERSAL RADIO COMMUNICATION TESTER	CMU200	110325	2007-01-18	2008-01-18

*** Statement of Traceability**: ZTE Corporation Reliability Test Center is accredited by China National Accreditation Service for conformity Assessment (CNAS), Accredited Program (Lab Code L0611).

Test Procedure

The RF terminal of the EUT was connected to the RF terminal of the CMU200. The RF terminal of the EUT was connected to a spectrum analyzer through the coupling.

Test Data

Environmental Conditions

Temperature:	25 ° C
Relative Humidity:	50%
ATM Pressure:	1009mbar

The testing was performed by LIUKE on 2007-11-7.

Test Result: Pass

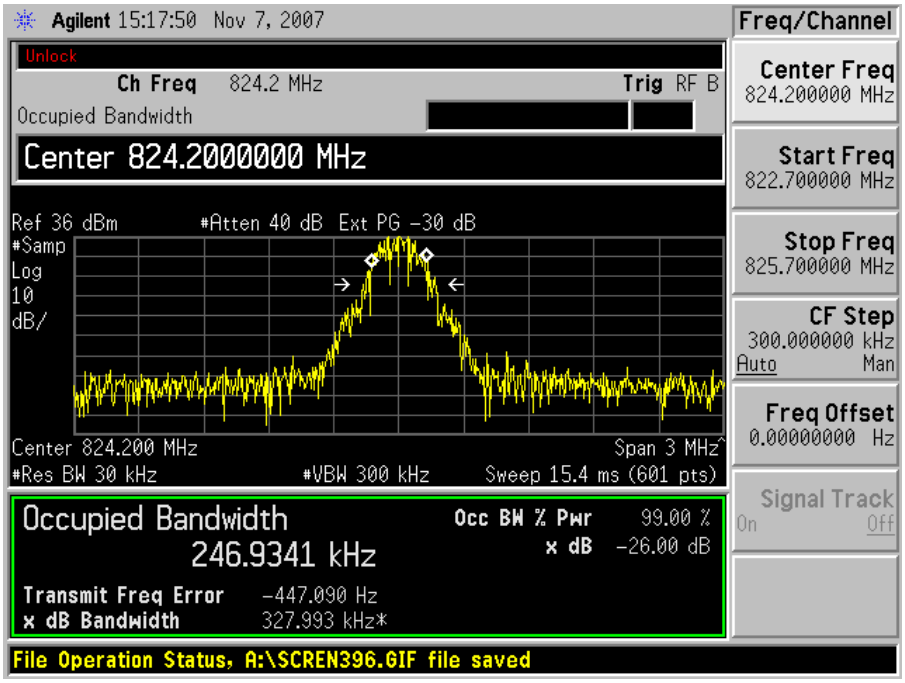
Test Mode: Transmitting

For 850 MHz

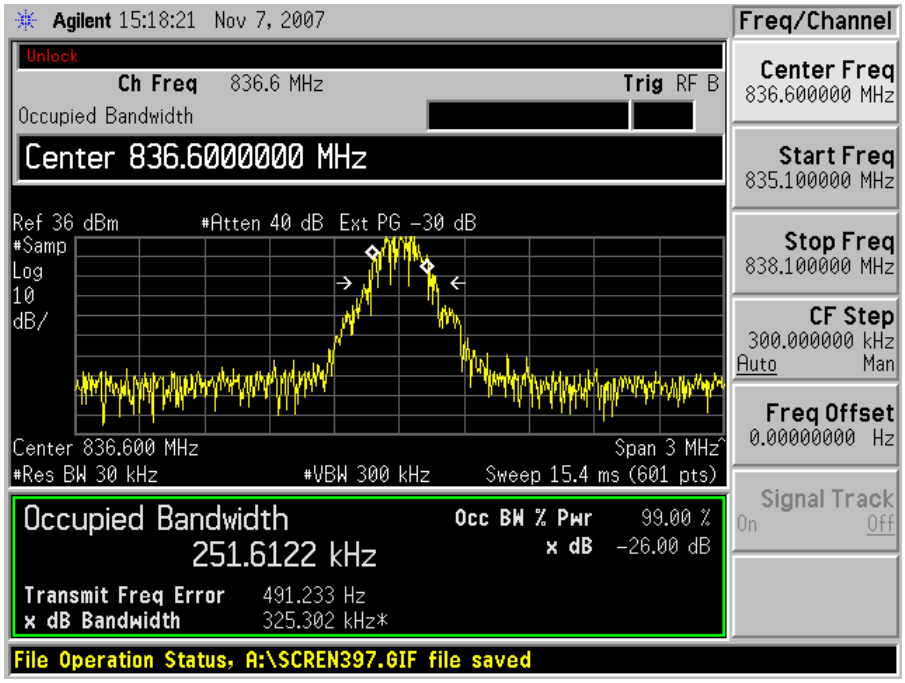
Occupied Bandwidth

Channel	Channel frequency (MHz))	99% Power Bandwidth (kHz)	26dB Bandwidth (kHz)
Channel 128	824.2	246.9341	327.993
Channel 190	836.6	251.6122	325.302
Channel 251	848.8	258.4947	317.184

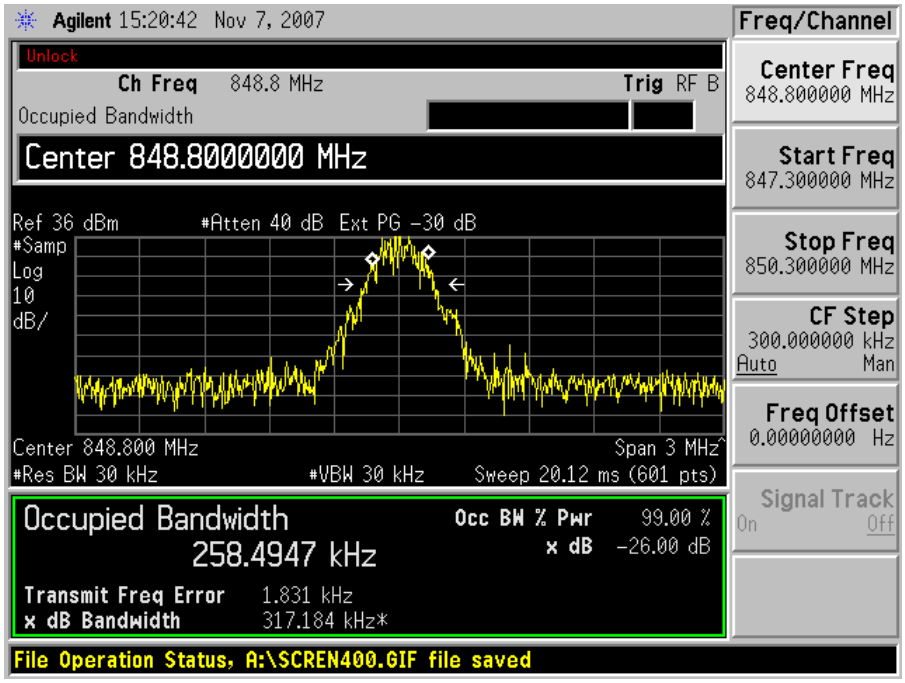
Channel 128:



Channel 190



Channel 251:

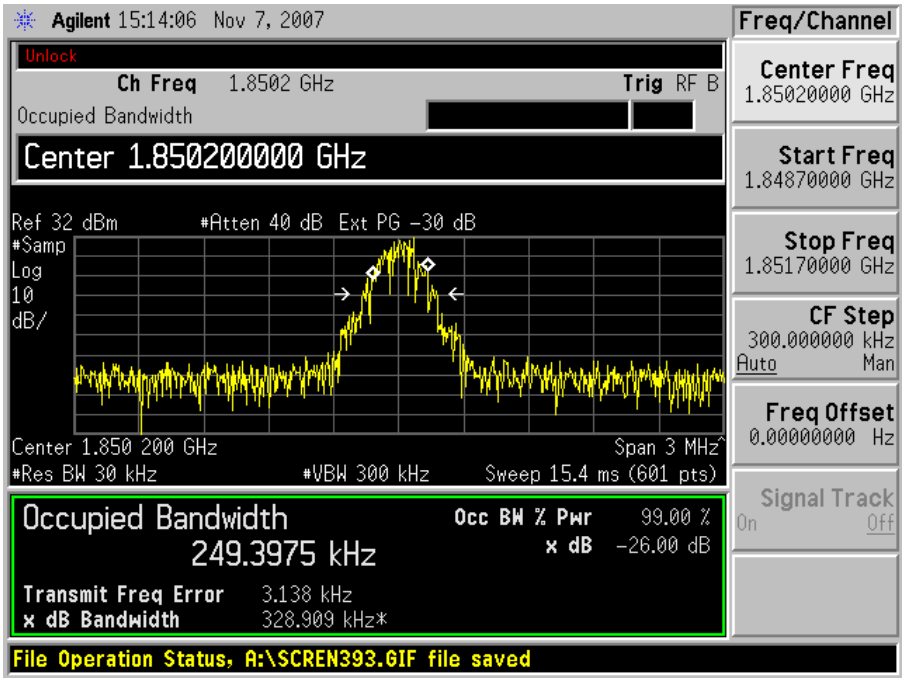


For 1900 MHz

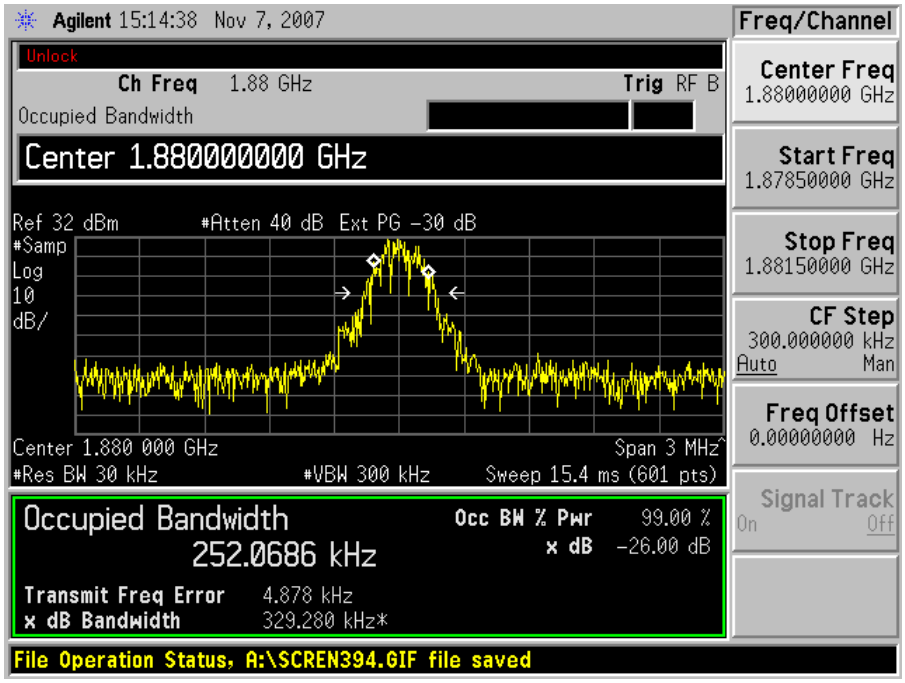
Occupied Bandwidth

Channel	Channel frequency(MHz))	99% Power Bandwidth (kHz)	26dB Bandwidth (kHz)
Channel 512	1850.2	249.3975	328.909
Channel 661	1880.0	252.0686	329.280
Channel 810	1909.8	243.8153	314.127

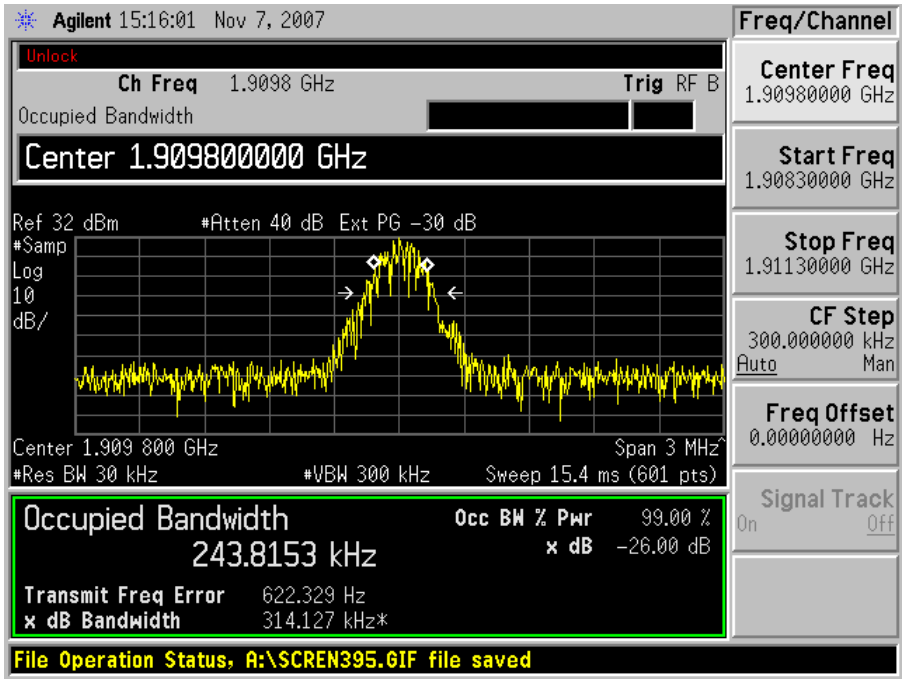
Channel 512:



Channel 661



Channel 810:



§24.238- BAND EDGES

Applicable Standard

According to §24.238 and §22.917, the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (p) by a factor of at least 43+10 log (p) dB.

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Agilent	Spectrum analyzer	E4405B	MY41440292	2007-01-18	2008-01-18
Guangzhou Jiesai	Coupling	30dB	\	\	\
R&S	UNIVERSAL RADIO COMMUNICATION TESTER	CMU200	110325	2007-01-18	2008-01-18

*** Statement of Traceability**: ZTE Corporation Reliability Test Center is accredited by China National Accreditation Service for conformity Assessment (CNAS), Accredited Program (Lab Code L0611).

Test Procedure

The RF terminal of the EUT was connected to the RF terminal of the CMU200. The RF terminal of the EUT was connected to a spectrum analyzer through the coupling.

Test Data

Environmental Conditions

Temperature:	24 °C
Relative Humidity:	59%
ATM Pressure:	1009 mbar

The testing was performed by LIUKE on 2007-11-7.

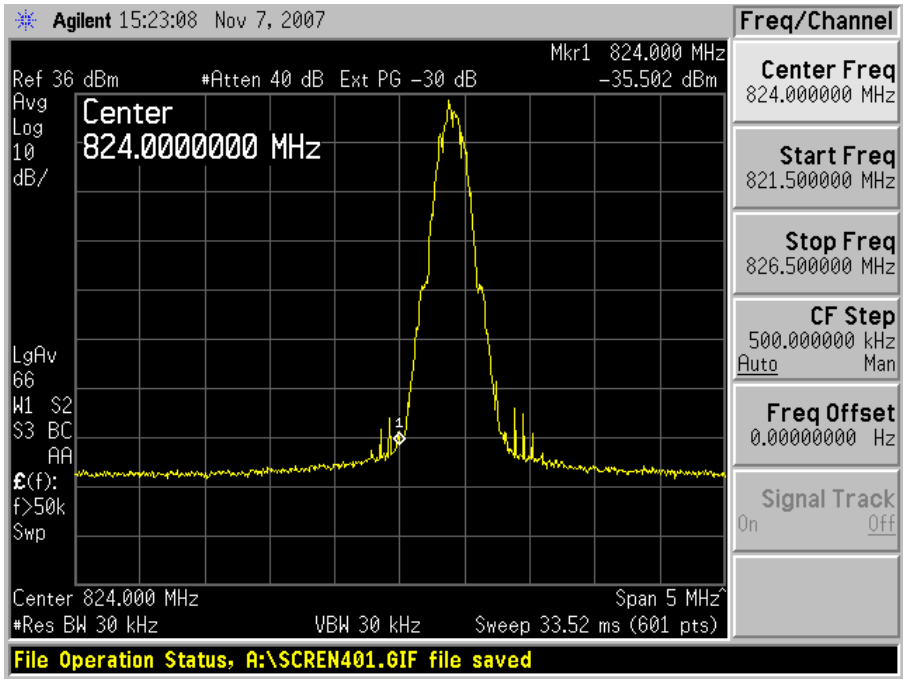
Test Result: Pass

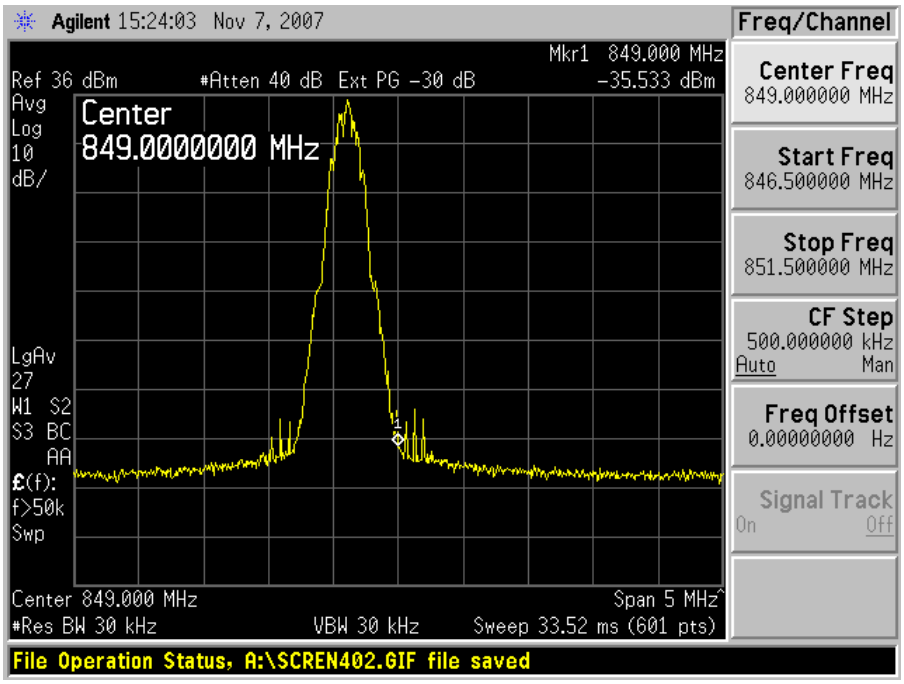
Test Mode: Transmitting

For 850 MHz

BAND EDGES

Frequency (MHz)	Emission	Limit(dBm)
824.0	-35.502	-13
849.0	-35.533	-13

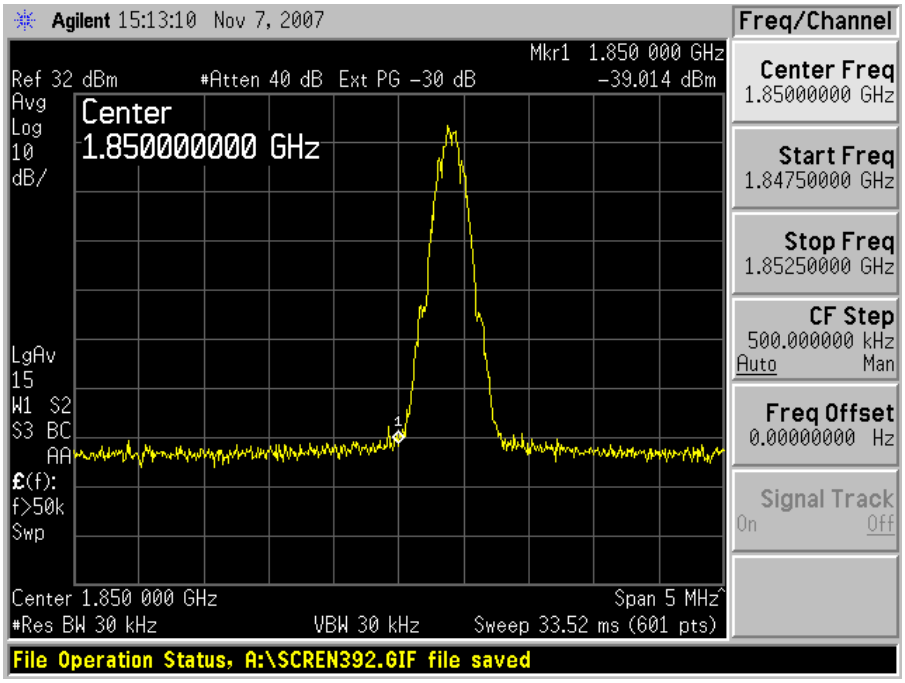


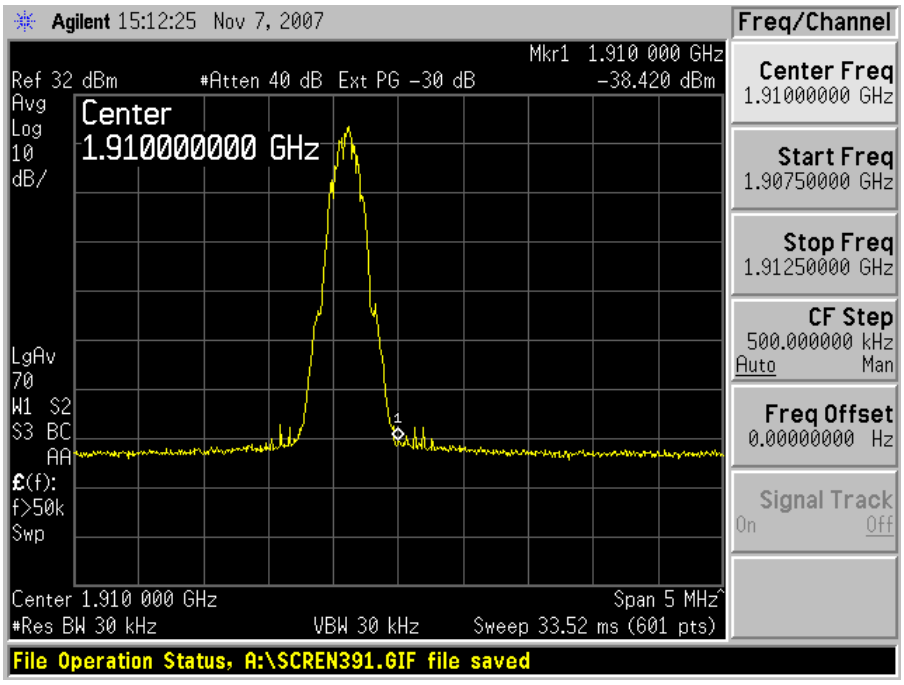


For 1900 MHz

BAND EDGES:

Frequency (MHz)	Emission (dBm)	Limit (dBm)
1850	-39.014	-13
1910	-38.420	-13





§2.1055 (a), §2.1055 (d), §22.355 & §24.235 - FREQUENCY STABILITY

Applicable Standard

Requirements: FCC § 2.1055 (a), § 2.1055 (d) & following:

According to §22.355, the carrier frequency of each transmitter in the Public Mobile Services must be maintained within the tolerances given in Table C-1 of this section.

Table C-1_Frequency Tolerance for Transmitters in the Public Mobile Services

Frequency range (MHz)	Base, fixed ppm	Mobile≦3watls ppm	Mobile 3 watts ppm
25 to 50	20.0	20.0	50.0
50 to 450	5.0	5.0	50.0
450 to 512.	2.5	5.0	5.0
821 to 896	1.5	2.5	2.5
928 to 929	5.0	n/a	n/a
929 to 960	1.5	n/a	n/a
2110 to 2220	10.0	n/a	n/a

According to §24.235, the frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	UNIVERSAL RADIO COMMUNICATIO N TESTER	CMU200	110325	2007-01-18	2008-01-18
KSON	Digital Temperature Cell	ATH-EHL100	3759	2007-01-28	2008-01-28

*** Statement of Traceability**: ZTE Corporation Reliability Test Center is accredited by China National Accreditation Service for conformity Assessment (CNAS), Accredited Program (Lab Code L0611).

Test Procedure

Frequency Stability vs. Temperature: The equipment under test was connected to an external DC power supply and the RF output was connected to a f Spectrum Analyzer via feed-through attenuators. The EUT was placed inside the temperature chamber. The DC leads and RF output cable exited the chamber through an opening made for the purpose.

After the temperature stabilized for approximately 20 minutes, the frequency output was recorded from the Spectrum Analyzer.

Frequency Stability vs. Voltage: An external variable DC power supply Source. The voltage was set to 115% of the nominal value and was then decreased until the transmitter light no longer illuminated; i.e., the end point. The output frequency was recorded for each voltage.

Test Data

Environmental Conditions

Temperature:	20° C
Relative Humidity:	49%
ATM Pressure:	1009 mbar

The testing was performed by LIUKE on 2007-11-5.

Test Result: Pass

Test Mode: Transmitting

For 850 MHz

Frequency Stability vs. Temperature				
Bottom Channel: 128 f = 869.2MHz				
Temperature (℃)	Power Supply V_{dc} (V)	Frequency Measure Error (Hz)	Error (ppm)	Limit (ppm)
-20	+3.42	-17	-0.01956	n/a
	+3.80	-18	-0.02071	n/a
	+4.18	8	0.00920	n/a
-10	+3.42	27	0.03106	n/a
	+3.80	15	0.01726	n/a
	+4.18	-20	-0.02301	n/a
0	+3.42	-27	-0.03106	n/a
	+3.80	-43	-0.04947	n/a
	+4.18	-46	-0.05292	n/a
+10	+3.42	35	0.04027	n/a
	+3.80	25	0.02876	n/a
	+4.18	-3	-0.00345	n/a
+20	+3.42	22	0.02531	n/a
	+3.80	19	0.02186	n/a
	+4.18	-8	-0.00920	n/a
+30	+3.42	−25	-0.02876	n/a
	+3.80	−65	-0.07478	n/a
	+4.18	−49	-0.05637	n/a
+40	+3.42	23	0.02646	n/a
	+3.80	20	0.02301	n/a
	+4.18	−12	-0.01381	n/a
+50	+3.42	−5	-0.00575	n/a
	+3.80	−32	-0.03682	n/a
	+4.18	-12	-0.01381	n/a
+60	+3.42	-11	-0.01266	n/a
	+3.80	-24	-0.02761	n/a
	+4.18	17	0.01956	n/a
+70	+3.42	20	0.02301	n/a
	+3.80	14	0.01611	n/a
	+4.18	-20	-0.02301	n/a
+80	+3.42	-8	-0.00920	n/a
	+3.80	-15	-0.01726	n/a
	+4.18	-9	-0.01035	n/a
Middle Channel: 190 f = 881.6MHz				
-20	+3.42	-20	-0.02269	n/a
	+3.80	-10	-0.01134	n/a
	+4.18	10	0.01134	n/a
-10	+3.42	−23	-0.02609	n/a
	+3.80	−31	-0.03516	n/a
	+4.18	−24	-0.02722	n/a
0	+3.42	66	0.07486	n/a
	+3.80	20	0.02269	n/a
	+4.18	−22	-0.02495	n/a
+10	+3.42	23	0.02609	n/a
	+3.80	-36	-0.04083	n/a

	+4.18	-50	-0.05672	n/a
+20	+3.42	3	0.00340	n/a
	+3.80	-28	-0.03176	n/a
	+4.18	-32	-0.03630	n/a
+30	+3.42	66	0.07486	n/a
	+3.80	1	0.00113	n/a
	+4.18	-21	-0.02382	n/a
+40	+3.42	-13	-0.01475	n/a
	+3.80	-49	-0.05558	n/a
	+4.18	-36	-0.04083	n/a
+50	+3.42	26	0.02949	n/a
	+3.80	9	0.01021	n/a
	+4.18	-23	-0.02609	n/a
+60	+3.42	-11	-0.01248	n/a
	+3.80	-27	-0.03063	n/a
	+4.18	14	0.01588	n/a
+70	+3.42	18	0.02042	n/a
	+3.80	8	0.00907	n/a
	+4.18	-47	-0.05331	n/a
+80	+3.42	-22	-0.02495	n/a
	+3.80	-18	-0.02042	n/a
	+4.18	-14	-0.01588	n/a
Top Channel: 251 f = 893.8MHz				
-20	+3.42	-25	-0.02797	n/a
	+3.80	-34	-0.03804	n/a
	+4.18	-25	-0.02797	n/a
-10	+3.42	45	0.05035	n/a
	+3.80	17	0.01902	n/a
	+4.18	-9	-0.01007	n/a
0	+3.42	-8	-0.00895	n/a
	+3.80	-13	-0.01454	n/a
	+4.18	-28	-0.03133	n/a
+10	+3.42	59	0.06601	n/a
	+3.80	-1	-0.00112	n/a
	+4.18	-7	-0.00783	n/a
+20	+3.42	43	0.04811	n/a
	+3.80	22	0.02461	n/a
	+4.18	6	0.00671	n/a
+30	+3.42	-3	-0.00336	n/a
	+3.80	-24	-0.02685	n/a
	+4.18	-25	-0.02797	n/a
+40	+3.42	68	0.07608	n/a
	+3.80	29	0.03245	n/a
	+4.18	-16	-0.01790	n/a
+50	+3.42	17	0.01902	n/a
	+3.80	28	0.03133	n/a
	+4.18	-30	-0.03356	n/a
+60	+3.42	-4	-0.00448	n/a
	+3.80	-19	-0.02126	n/a
	+4.18	-32	-0.03580	n/a
+70	+3.42	21	0.02350	n/a
	+3.80	24	0.02685	n/a
	+4.18	15	0.01678	n/a
+80	+3.42	-17	-0.01902	n/a
	+3.80	-10	-0.01119	n/a

	+4.18	6	0.00671	n/a

For 1900 MHz

Frequency Stability vs. Temperature				
Bottom Channel: 512 f = 1930.2MHz				
Temperature (℃)	Power Supply V_{dc} (V)	Frequency Measure Error (Hz)	Error (ppm)	Limit (ppm)
-20	+3.42	-20	-0.01036	n/a
	+3.80	70	0.03627	n/a
	+4.18	13	0.00674	n/a
-10	+3.42	-40	-0.02072	n/a
	+3.80	-71	-0.03678	n/a
	+4.18	32	0.01658	n/a
0	+3.42	-57	-0.02953	n/a
	+3.80	-20	-0.01036	n/a
	+4.18	26	0.01347	n/a
+10	+3.42	-28	-0.01451	n/a
	+3.80	-23	-0.01192	n/a
	+4.18	-12	-0.00622	n/a
+20	+3.42	-36	-0.01865	n/a
	+3.80	-71	-0.03678	n/a
	+4.18	-52	-0.02694	n/a
+30	+3.42	34	0.01761	n/a
	+3.80	27	0.01399	n/a
	+4.18	-27	-0.01399	n/a
+40	+3.42	-21	-0.01088	n/a
	+3.80	-66	-0.03419	n/a
	+4.18	-54	-0.02798	n/a
+50	+3.42	27	0.01399	n/a
	+3.80	-62	-0.03212	n/a
	+4.18	-88	-0.04559	n/a
+60	+3.42	29	0.01502	n/a
	+3.80	22	0.01140	n/a
	+4.18	-17	-0.00881	n/a
+70	+3.42	22	0.01140	n/a
	+3.80	5	0.00259	n/a
	+4.18	-52	-0.02694	n/a
+80	+3.42	-46	-0.02383	n/a
	+3.80	3	0.00155	n/a
	+4.18	20	0.01036	n/a
Middle Channel: 661 f = 1960.0MHz				
-20	+3.42	-23	-0.01173	n/a
	+3.80	-70	-0.03571	n/a
	+4.18	24	0.01224	n/a
-10	+3.42	-31	-0.01582	n/a
	+3.80	35	0.01786	n/a
	+4.18	-18	-0.00918	n/a
0	+3.42	-35	-0.01786	n/a
	+3.80	-58	-0.02959	n/a

	+4.18	-88	-0.04490	n/a
+10	+3.42	66	0.03367	n/a
	+3.80	76	0.03878	n/a
	+4.18	10	0.00510	n/a
+20	+3.42	86	0.04388	n/a
	+3.80	45	0.02296	n/a
	+4.18	-62	-0.03163	n/a
+30	+3.42	-48	-0.02449	n/a
	+3.80	-53	-0.02704	n/a
	+4.18	-14	-0.00714	n/a
+40	+3.42	56	0.02857	n/a
	+3.80	68	0.03469	n/a
	+4.18	-21	-0.01071	n/a
+50	+3.42	47	0.02398	n/a
	+3.80	28	0.01429	n/a
	+4.18	-12	-0.00612	n/a
+60	+3.42	-57	-0.02908	n/a
	+3.80	-70	-0.03571	n/a
	+4.18	-40	-0.02041	n/a
+70	+3.42	21	0.01071	n/a
	+3.80	-21	-0.01071	n/a
	+4.18	-35	-0.01786	n/a
+80	+3.42	-19	-0.00969	n/a
	+3.80	-55	-0.02806	n/a
	+4.18	7	0.00357	n/a
Top Channel: 810 f = 1989.8MHz				
-20	+3.42	40	0.02010	n/a
	+3.80	55	0.02764	n/a
	+4.18	-20	-0.01005	n/a
-10	+3.42	-35	-0.01759	n/a
	+3.80	-5	-0.00251	n/a
	+4.18	-15	-0.00754	n/a
0	+3.42	29	0.01457	n/a
	+3.80	17	0.00854	n/a
	+4.18	-25	-0.01256	n/a
+10	+3.42	-4	-0.00201	n/a
	+3.80	-58	-0.02915	n/a
	+4.18	-85	-0.04272	n/a
+20	+3.42	64	0.03216	n/a
	+3.80	-12	-0.00603	n/a
	+4.18	-65	-0.03267	n/a
+30	+3.42	79	0.03970	n/a
	+3.80	47	0.02362	n/a
	+4.18	-9	-0.00452	n/a
+40	+3.42	-16	-0.00804	n/a
	+3.80	-33	-0.01658	n/a
	+4.18	-85	-0.04272	n/a
+50	+3.42	-35	-0.01759	n/a
	+3.80	-83	-0.04171	n/a
	+4.18	-120	-0.06031	n/a
+60	+3.42	7	0.00352	n/a
	+3.80	14	0.00704	n/a
	+4.18	-26	-0.01307	n/a
+70	+3.42	-27	-0.01357	n/a
	+3.80	-52	-0.02613	n/a

	+4.18	-23	-0.01156	n/a
+80	+3.42	-26	-0.01307	n/a
	+3.80	-40	-0.02010	n/a
	+4.18	-42	-0.02111	n/a

EXHIBIT A - FCC ID LABEL INFORMATION

Proposed FCC ID Label

FCC ID: Q78-MG3006

Proposed Label Location on EUT

EXHIBIT B - TEST SETUP PHOTOGRAPHS

Radiated Setup

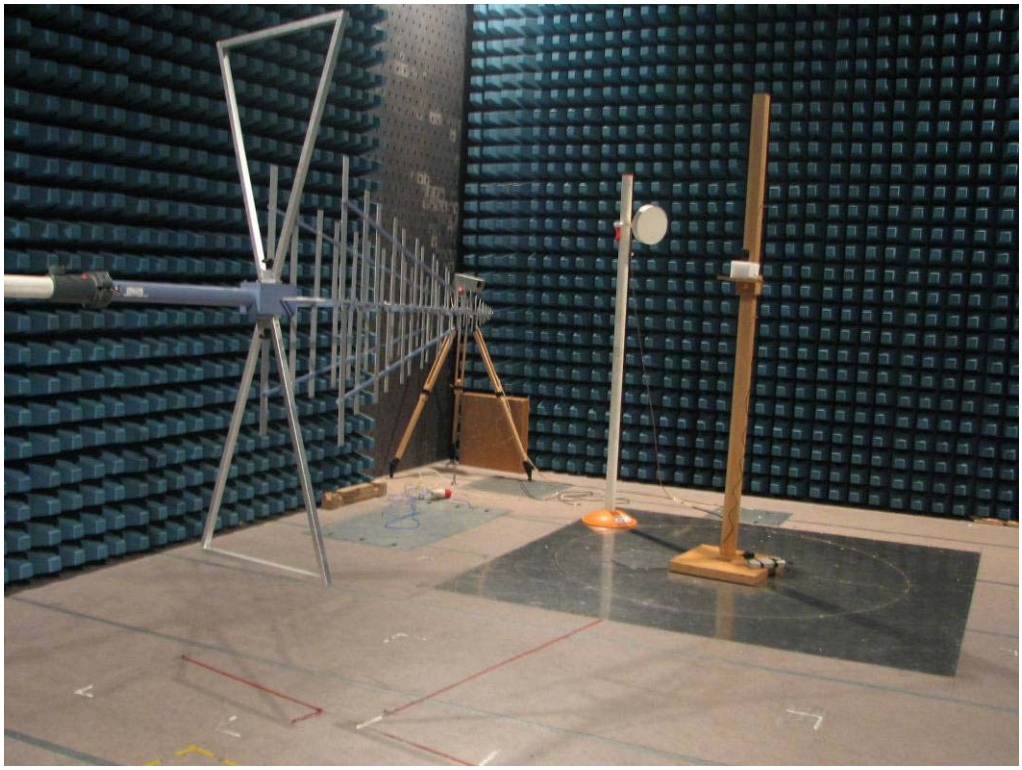
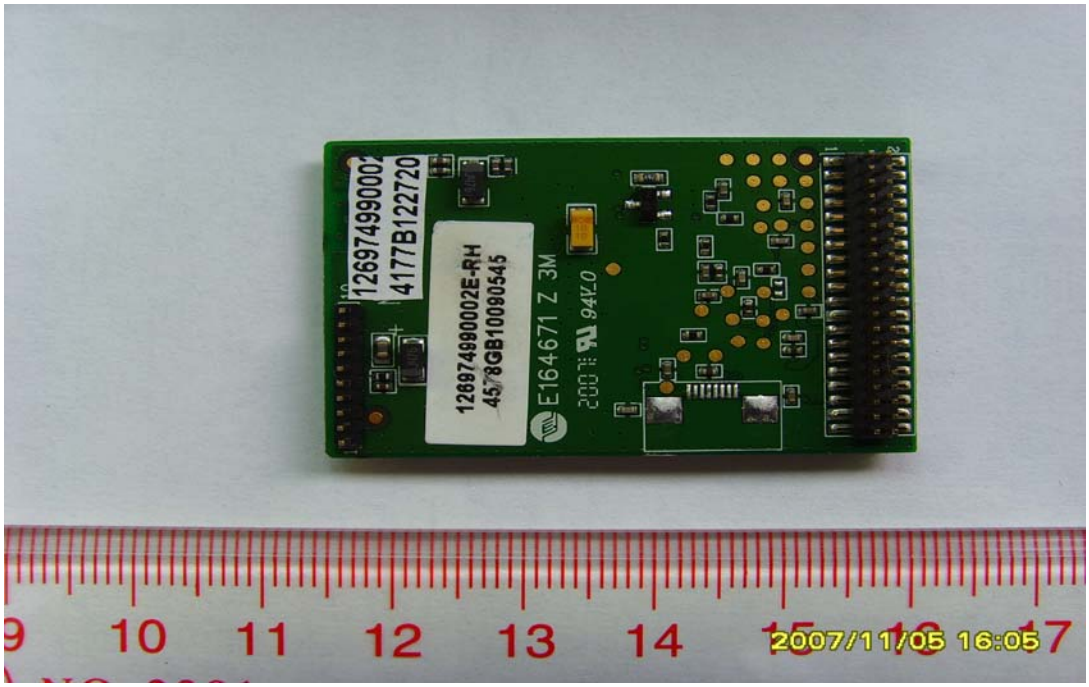


EXHIBIT C - EUT PHOTOGRAPHS

EUT Top View

EUT Bottom View



EUT Top Components View(without shield can)